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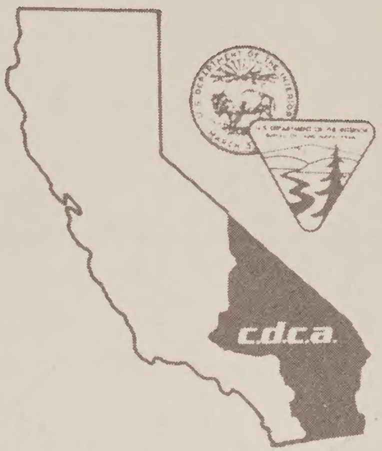

Final Environmental Impact Statement and Proposed Plan

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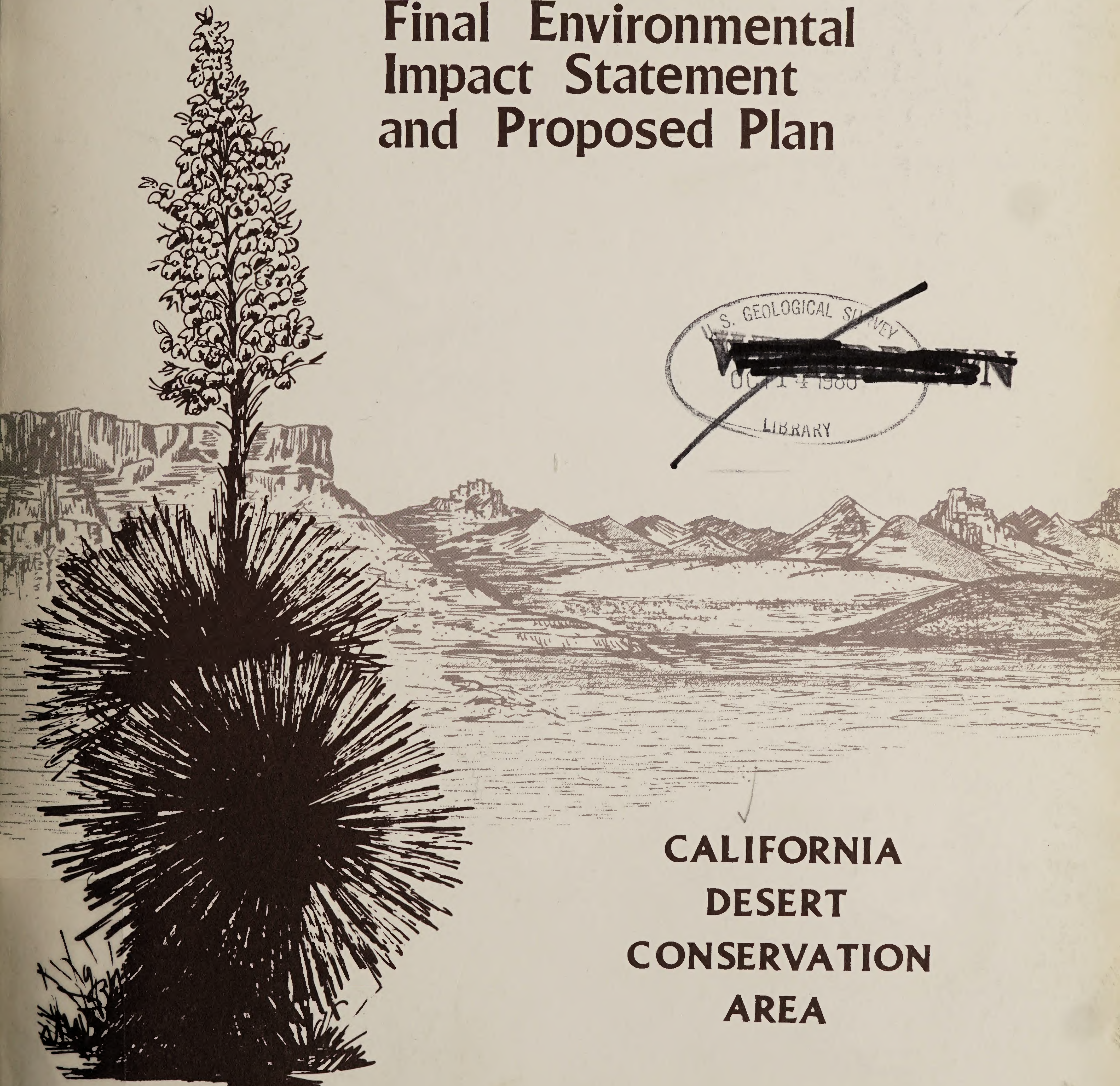

CALIFORNIA DESERT CONSERVATION AREA

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California State Office
State Director
Sacramento, California

California Desert Advisory Committee

Desert Planning Staff
Riverside, California

Riverside and Bakersfield Districts
B.L.M. Staff

the California Desert Conservation Area

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James B. Ruch
California State Director
Bureau of Land Management

FINAL ENVIRONMENTAL IMPACT STATEMENT

AND PROPOSED PLAN

CALIFORNIA DESERT CONSERVATION AREA

Type of Action:
( ) Draft (x) Final Environmental Impact Statement
(x) Administrative ( ) Legislative

For Further Information contact:

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(714) 787 - 1428

Responsible Agency:
Lead Agency:

U.S. Department of the Interior
Bureau of Land Management
California State Office

Location of Action: All or part of the following counties within the State of California:

Imperial
Inyo
San Diego
Riverside
San Bernardino
Mono
Kern
Los Angeles

Scope: This final environmental impact statement is a broad scope analysis of the proposed California Desert Plan. Detailed environmental impact statements/environmental assessments will be prepared on site-specific actions and any development of specific activity plans (i.e., wilderness, allotment management plans, habitat management plans) as appropriate.

Abstract: The Proposed Action is a long-range, comprehensive plan to manage the public land uses and resources of the 25-million-acre California Desert Conservation Area (CDCA). The action responds to the mandate of Section 601 of the Federal Land Policy and Management Act of 1976 to create a plan for the CDCA based on the principles of multiple-use, sustained yield, and maintenance of environmental quality. The action is accomplished primarily by means of four multiple-use classes which control and direct uses and support resources on a desertwide basis. Alternatives to the Proposed Plan are:

A No Action Alternative, which describes management of the CDCA in the absence of a long-range comprehensive plan.

A Protection Alternative, in which the maintenance of environmental quality is given maximum management emphasis.

A Balanced Alternative, which represents a balancing of conflict and tradeoffs between uses, without a predetermined management philosophy.

A Use Alternative, which often favors consumptive uses and production of goods in tradeoff decisions.

Date by which comments must be received:

November 2, 1980
(See Section II-E of EIS)

Location to which comments must be sent:

BLM, California Desert District
Box 5555
Riverside, California 92506

Final Environmental Impact Statement

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United States Department of the Interior

BUREAU OF LAND MANAGEMENT

CALIFORNIA STATE OFFICE

Dear Reader:

It is a great pleasure for me to offer for your review and comment this Final Environmental Impact Statement and Proposed Plan for your public lands in the California Desert Conservation Area. As I said when I wrote to you last February, the most important thing about the Plan is you. That is still true. You and eighteen thousand of your fellow citizens, all owners of the public lands, received and read the Draft Plan Alternatives and EIS for the Desert. Over half of you provided comments on the Draft, and from those comments this document was built.

Your help is needed again. This proposal represents our best effort at what we think is a comprehensive, long-range plan to guide the management, use, and protection of the California Desert should be -- using what you have told us up to now. During the next month will you read this Plan and statement, and tell us what you think before the end of October ? At that time we put the Final Plan together for approval by the Secretary of the Interior.

I hope you find this book readable and understandable. It is a complex subject at best and many of the reviewers felt the Draft was "daunting" and "cumbersome". We have tried to keep it as short, clear, and concise as possible this time. We have tried not to repeat anything that was already said in the Draft. We have tried to put the technological and methodological detail in the appendices. We have tried not to waste your time with too much of what you already know. We have put the Final Environmental Impact Statement with all the introductory material first and the Proposed Plan last because, after all, the environmental analysis and the review process leads up to the Proposed Plan.

May I suggest that you read the introductory material first, including the "Perspective" and "Summary", then read the "Purpose and Need" section in the Statement and the "Plan Goal" section which introduces the Proposed Plan. With that you have a background for exploring the process used in arriving at the Plan by reading through Section II of the EIS, or reading the Proposed Plan, both the general multiple-use guidelines and the elements of interest to you.

Like the Desert itself, the Plan might be thought of as a total ecosystem. Everything seems to be connected to, or affected by, everything else. I imagine that you, like most readers, will wind up reading the whole document. Then, if you want to dig into technical detail and background information you might want to go look at, or send for one or more of the appendix volumes described in Section VII of the EIS. (They weren't all sent out to the entire mailing list since the cost of printing and distributing this material is phenomenal ! We're trying to make sure you get what you want to read without wasting your money).

The prediction I made in February, that you and other public land owners would have differing ideas about how the Desert should be managed, proved to be true. Your comments and ideas ranged across the entire spectrum of alternatives and then some. But they were of immense help in focusing our efforts on the major issues in the California Desert and much of this document is based upon the analysis of and efforts to resolve those issues in a broad multiple-use plan mandated by the Congress. The Plan is, of course, only a beginning. Under its general guidance, projects, programs, resource and site plans, and amendments will require specific assessment in the years ahead. Those, too, will be public processes.

I know that asking you to comment again takes your time and effort, however, it's only one month this time, and on behalf of the entire California Desert Conservation Area Advisory Committee, the Bureau of Land Management staff, and myself, I'd like you to know that we want and welcome your review.

Sincerely,

James B. Ruch
California State Director
Bureau of Land Management

C D C A Advisory Committee

Established under Section 601 (g) (1) in accordance with the provisions of Section 309 (a) of the Federal Land Policy and Management Act of 1976, to advise the Secretary of the Department of the Interior with respect to the preparation and implementation of the comprehensive, long-range plan required for the management, use, development, and protection of the public lands within the California Desert Conservation Area.

Standing:
(Left to right)

LAURENCE W. LANE, Jr.
Public Affairs

RICHARD VOGL
Botanical Resources

WILBUR W. MAYHEW
Wildlife Resources

HARVEY PERLOFF
Social Science

FRANK De VORE
Energy - Utilities

WILLIE PINK
General Public
(Native Americans)

JAMES W. BURNS
State Government

RICHARD H. JAHNS
Earth Science

E. DEAN LEMON
Mining - Minerals

Seated:
(Left to right)

CLAYTON A. RECORD, Jr.
Adv. Comm. Chairman
Elected General - Purpose
Government

RUTH SIMPSON
Archaeology

RONALD J. SLOAN
Outdoor Recreation

GENNY SMITH
Outdoor Recreation

W. LEON HUNTER
Environmental Science

ERNA SCHUILING
General Public

Summary of Action

BACKGROUND

Section 601 of the Federal Land Policy and Management Act of 1976 established the 25-million-acre California Desert Conservation Area (CDCA) and requires that the Secretary of the Interior prepare a long-range, comprehensive plan for the management, use, development, and protection of the over 12 million acres of public lands in the CDCA admisinistered by the Bureau of Land Management. The Act requires that the Plan take into account the principles of sustained yield and multiple-use in providing for resource use, development, and the maintenance of environmental quality, and that implementation of the Plan be initiated on or before September 30, 1980.

The location of the action is generally that portion of the North American Desert falling within the boundaries of the State of California. Its character and size have precluded, until recently, extensive human development, despite the proximity of the Los Angeles/San Diego metropolitan complex. A diversity of land forms and differing climatic regimes have created a number of wildlife ecosystems and floristic subdivisions. Developed in response to aridity and extreme temperatures, these natural systems are very sensitive.

The region offers an abundance of resource values which are both nationally and regionally significant. Recreation is particularly important, but increasing use is causing conflict between visitors with different recreational goals, as well as with traditional uses such as grazing. Motorized vehicle access is particularly important as a support for all human use of the desert, but the proliferation of roads and increasing damage to sensitive natural values and solitude require management attention. As desert resources have become more and more utilized, conflicts have centered on several major issues.

PROPOSED PLAN

In response to these issues, the Proposed Plan for the California Desert Conservation Area offers a multi-dimensional land use and resource management program. Among its features:

1. Provides general regional guidance for the management of the CDCA over a 20-year time period.

2. Controls and directs the type and degree of land use and resource management activities according to resource sensitivity and public demand, by means of four Multiple-Use Classes: Controlled (Class C), Limited (Class L), Moderate (Class M), and Intensive (Class I).

3. Provides Plan Elements for 12 resource or use categories of major public interest.

4. Proposes the official designation of 73 Areas of Critical Environmental Concern (ACECs) to protect sensitive natural and cultural resource values.

Among specific provisions of the Proposed Plan:

1. Recommends 2.07 million acres as suitable for wilderness designation.

2. Provides 16 utility planning corridors for energy transmission in consideration of natural resource values and projected demands.

3. Provides motorized vehicle access through a program of vehicle access designation of "open," "closed," and "limited," access. In Class M access is "limited" to existing routes of travel; in Class L, to approved routes of travel in accordance with sensitive resource values.

4. Provides for the pursuit of any of a full range of recreational opportunities, ranging from competitive racing events to wilderness experiences.

5. Provides a coordinated desertwide approach to the management of fish and wildlife species and habitats in the CDCA. Of the 73 ACECs, 27 have been identified as solely or partially to protect wildlife values. Habitat Management Plans would be prepared for 57 areas which span all multiple-use classes.

6. Proposes management for desert vegetation resources according to two perspectives: protection of rare, threatened or endangered plant life and unique plant assemblages, including those in riparian and wetland areas; and the use of vegetation for livestock, wildlife and other forage consumers, and to such human consumptive uses as plant harvesting.

7. Proposes the allocation of about 74,700 Animal Unit Months (AUMs) of perennial forage to livestock use (a 25 percent reduction from existing prefer-

ence); range improvements which will promote more efficient use of the forage resource, including fencing and water developments; season-of-use adjustment to improve range condition and herds and to satisfy wildlife resource needs; and the institution of 15 new allotments.

8. Provides for the wild and free-roaming behavior of wild horses and burros within 17 Herd Management Areas. To achieve ecological balance and reduction of resource conflicts, a total population level of approximately 280 horses and 2,800 burros by 1985 is a goal.

9. Places 66 percent of known cultural values in high to moderate protection; and proposes a coordinated management program of research, protection, public interpretation, and mitigation of adverse impacts.

10. Explains the mineral and energy potential of the CDCA and provides opportunities for the development of the Geology-Energy-Mineral resources while maintaining the quality of the environment. Outlines proposed BLM policy in regard to mineral exploration and development activities under new Federal and State regulations.

11. Accommodates the cultural values of CDCA Native American tribes in its decisions and commits the Bureau to coordination with Tribal groups in resource management decisions which may affect their traditional and religious activities.

12. Relates to existing State and local government plans and provides for future consistency.

ALTERNATIVES CONSIDERED

There was no proposed action in the draft. Rather, the Proposed Plan was developed as a result of the evaluation and public review of four Draft Plan Alternatives.

Protection Alternative: Management actions are directed toward providing the strongest preservation and protection of natural and cultural values allowed within a multiple-use framework. This alternative proposes 43 percent of BLM-administered lands in the CDCA as wilderness designation and only 6 percent in multiple-use classes in which consumptive uses are given equal or favored consideration in tradeoff decision.

Use Alternative: This alternative maximizes production values and consumptive uses of desert resources, while complying with legally required environmental protection standards. Within the framework of a multiple-use and sustained yield plan, motorized vehicle access, livestock grazing, mineral exploration and development, energy production and development, and energy production and utility transmission are given the widest latitude of all alternatives.

Balanced Alternative: A variety of uses are provided within the Desert's sustained yield capability. Conflicts and tradeoffs between uses consider the constraint of protecting fragile resources from irreversible decline. Fifty-eight percent of BLM-administered lands are in protection-oriented multiple-use classes; the remainder, in use-oriented classes.

No Action Alternative: This alternative displays present management of CDCA lands in terms of multiple-use class designations and the Plan components, but is not a realistic option because current management is not in accordance with the mandate prescribed by FLPMA for managing the Desert. While some aspects of present management may be continued, the main virtue of this alternative is as a benchmark by which to measure the above alternatives.

SUMMARY OF MAJOR IMPACTS

No Action Alternative

The impacts which would result from the lack of a comprehensive plan for CDCA land use and resource management are substantially negative. Not only would severe degredation and continuing decline to the Desert's ecological, biological, scenic, and cultural values occur, but potential project applicants for energy and utility transmission would still experience costly delays in seeking environmentally sound and acceptable locations. Mineral exploration and development activities, however, would experience the fewest constraints.

Protection Alternative

Under this alternative, the Desert's sensitive wildlife, vegetation, soil, air and water resources would experience the greatest possible benefit and protection. Native American and cultural values would suffer the least potential decline. This fostering of sensitive natural and cultural resource values would occur at a high cost to mineral exploration and development, livestock grazing, and motorized vehicle recreation.

Balanced Alternative

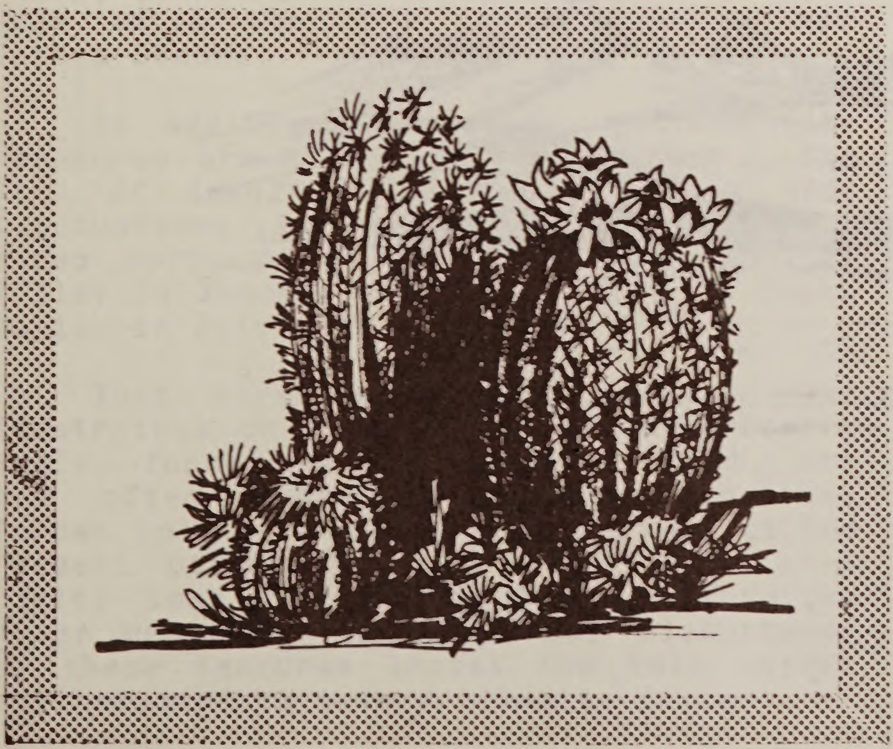
Both positive and negative impacts would occur under this alternative which calls for a balance of use and protection of deert resources. Multiple-use class designation generally protects natural and cultural resource value, but negative localized impacts would occur in some areas, particularly at the site of "open" vehicle areas in some livestock grazing allotments. Increased restriction on mining would somewhat reduce opportunities for exploration and development. This alternative depicts a projection of an optimum multiple-use mix, but does not reflect the massive public input to the draft or the resolution of public issues.

Use Alternative

Utility transmission and energy development, mineral exploration and development, livestock grazing, and vehicle-oriented recreation would experience major beneficial impacts under this alternative, but a high level of negative impact would be incurred by wildlife, vegetation, Native American values and cultural resources.

Proposed Plan

The overall effects of this alternative are positive. While there are minor impacts to sensitive resources associated with the allowance of open ORV use on four percent of BLM-administered lands, some livestock grazing allotments, and potential mining activity, these are largely offset by extensive allocations of protection-oriented multiple-use classes. Consumptive uses would be allowed within environmental parameters. The major benefit of this alternative is that it was developed from the resolution of conflict identified during the extensive public involvement process.



MAJOR AREAS OF CONTROVERSY

Motorized Vehicle Access: The Desert's large size, extreme temperatures, and characteristically varied and sparsely vegetated terrain has favored the use of motorized vehicles for access. Roads and ways have proliferated. Controversy exists about how much this traditional freedom of access should be curtailed to protect fragile desert resources and the sensitivities of other users.

Wildlife Protection: Lists of rare, threatened or endangered wildlife species testify to the deterioration of wildlife habitat quality caused by increasingly pervasive consumptive use. Controversy exists about the degree to which necessary measures to safeguard wildlife should be required to constrain economic and recreational uses.

Wilderness: "Wilderness" has assumed a high value in the American consciousness. The Desert has abundant wilderness characteristics; preservation of these contributes to an awareness of other limited resources, particularly minerals and energy.

ACECs: Rare and special features of the Desert's natural environment or evidence of past human activity deserve concentrated management attention. Controversy exists about how many locations in which the strong management proscriptions of the ACEC should be applied.

Mineral Exploration and Development: The mineral resources of the Desert's geological environment may have an in-place value of several hundred billion dollars. There is a basic human need of these resources and a key to finding and developing them is availability of land for exploration; however, finding and extracting mineral resources can conflict with measures to protect the natural environment against disturbance.

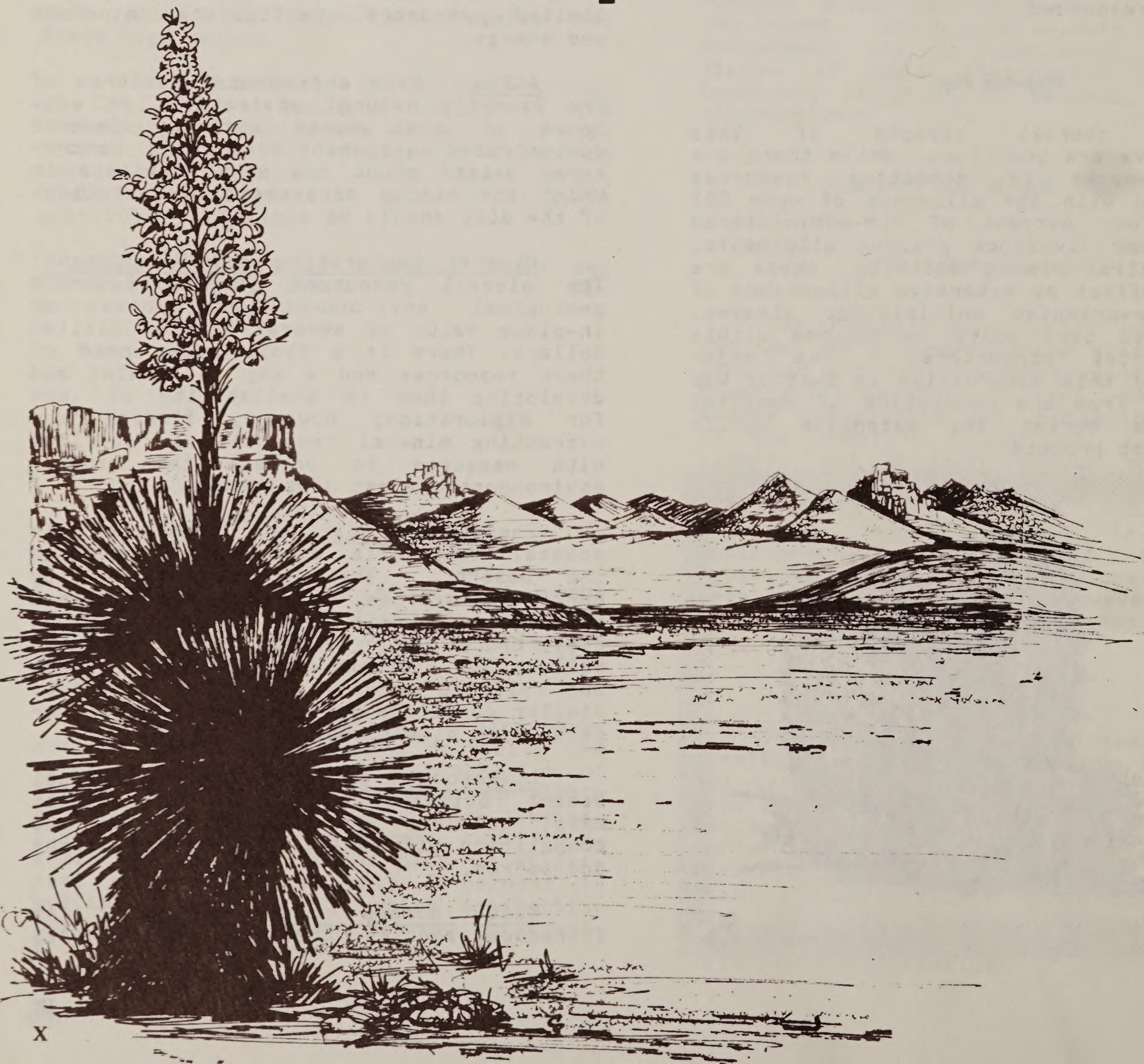
Energy and Utilities: Much of the coastal metropolis energy comes through the Desert. The routing of utility corridors arouses controversy in desert communities, among those concerned about disturbance of natural and cultural values, and citizens who believe efficient and reliable services should come first. Similar conflicts arise in regard to power generation site proposals in the Desert.

Livestock Grazing: This traditional Desert activity confronts recreational uses, cultural resources protection and competition with wildlife and wild horses and burros.

Wild Horses and Burros: An introduced species, these large herbivores are protected by Federal law. The controversy exists about what population increases have done and will do to the ecological balance required by the law, and needed to maintain healthy herds and animals.

Recreation: The increasing numbers of people who are "getting away from it all" in the California Desert find that some of it is coming with them. Increasing numbers and types of recreation may disturb natural values and create conflicts among differing types of recreationists competing for the same areas, and also conflicts between recreationists and other users of the Desert.

Procedural Issues: A number of issues are related to the preparation of the Desert Plan and management proposal to resolve conflicts. Among these are: the use of an ecosystem-based analysis, the adequacy of decision documentation, the size and complexity of the Draft Plan, the adequacy of the Draft EIS impact assessment, and the depth of detail in implementation of the Proposed Plan. These issues are discussed in detail in the EIS.



Perspective

Although a land which is now desert was the cradle of civilization, humankind generally considers these arid regions as bleak and lifeless and seeks greener places to live. The Spanish explorer De Anza, traveling across the southern part of what is now California, named the region of his ordeal "The Land of the Dead." Scores of grim tales of death and bare survival characterize the history of the California Desert. Yet, even as the sprawling Los Angeles and San Diego metropolitan areas loom on its western edge, there are growing numbers of people who find behind the region's forbidding aspect a delightful and surprising diversity of natural forms and processes. Many have come to feel for the Desert an affection which is, in words of one writer, "'born of a face perceived, but never fully seen".

Within the area we know as the California Desert, scientists recognize three deserts: the Mojave, the Sonoran, and a small portion of Great Basin. Subtropical high pressure belts, the "rainshadow" effect of the coastal mountain ranges, and other topographical features create conditions by which some geographers define a desert: an area in which evaporation and transpiration exceed the mean annual precipitation.

The California deserts were cooler and moister places in the past. Prior to the end of the last ice age, Joshua trees, pinyon pines, sagebrush and junipers extended across broader expanses than they do today. A subsequent drying trend caused these plant communities to retreat to higher elevations, leaving small enclaves of white fir forests on mountaintops and species like the creosote bush to dominate the lowlands. This trend toward increasing dryness is evident in rainfall records kept since the last century. Today, parts of the Sonora Desert receive less water than any other place in the United States.

In addition to aridity, extreme temperatures are a trait of the desert. The lack of insulating humidity causes wide fluctuations in daily seasonal temperatures varying from 14°F at Deep Springs Valley in January to nearly 117°F at Death Valley in July.

This harsh climate imposes several constraints on natural processes. Desert soils, formed during the humid past, are now often protected against erosional forces only by natural soil crusts, called "desert pavement", and what little stability that the sparse desert vegetative cover provides. Any surface disturbance of these features leaves the thin desert soil exposed to severe climatic factors.

In the older deserts of the world, wind and water have scoured features of the landscape into flat, low-relief surfaces. In the California Desert, a variety of landforms, including valleys, bajadas, pediments, alluvial fans, rough-hewn mountain ranges, washes, sand dunes and dry lake beds, testify to its relative youth as a desert. These land forms mix with varying soil conditions and climatic variations to form a number of ecosystems, in which desert plant and animal life face formidable challenges from both the human and natural environment in their fight for survival.

Desert organisms face a tough task to maintain water balance. Most plants are annuals which avoid the problem of aridity by remaining in the form of seeds until rains bring them to life. During their short span of growth, they present the stunning displays of wildflowers which are well-known in some parts of the California desert.

Desert perennials often use novel physiological and anatomical adaptations to endure this hostile environment. Some plants have "dual" root systems, with wide lateral roots to catch surface water and deep "tap" roots to search out underground moisture. Short-rooted succulents store water in their stems and ration it during dry spells. Plants like the drought-deciduous ocotillo shed their leaves entirely during these periods to reduce water loss through evaporation. Some agave and yucca plants are able to reduce water losses by taking in carbon dioxide needed for photosynthesis at night.

Some desert animals also display these special structural adaptations. The desert tortoise is able to store water in sacs under its shell. Some desert arthropods can take water directly from the air when the relative humidity is over 80 per-

cent. More often, however, the desert animal's adaption is behavioral; it limits activity to the coolness of night, dawn or dusk. Much desert activity occurs around seeps, springs, and other surface water sources which, although rare, are extremely important to the carefully balanced natural ecosystems.

An understanding of the relationship between natural processes and landscape cannot be complete without a recognition of the human presence. Man is not an alien to the environment. His structures and activities change and become a part of the system. It is inevitable that, as population and economic activity expand, the natural setting and associated life forms will change. In the California Desert a pattern of human uses has evolved from a multitude of single-purpose ventures which reflect western history and serve present needs.

The earliest inhabitants of the California Desert wrought changes in the land which are still visible in many areas. These Native Americans, prior to European contact in the mid-16th century, hunted and foraged for food, set down permanent and seasonal village sites, mined and quarried for common and exotic stones, flood-irrigated land for agriculture, and traded goods through an elaborate network of foot trails. Their awe and respect for natural features and processes formed the basis for religious practices. The native system of foot trails was of great value to the Spanish, who saw the Desert as little more than a daunting obstacle over which they had to travel between their settlements in New Mexico and coastal California. After acquisition of the area by the United States in the mid-19th century, land use intensity continually increased.

Initial forays through the area were made by explorers, soldiers, and Mormon settlers. Then came a growing stream of emigrants bound for coastal California, protected by military forts and supplied by outposts along the route. Washington treaty makers and railroad surveyors arrived next, and some remained in the region. In 1856, one government surveyor staunchly defended his activities in the region against the cries of those who claimed the place was "not worth a red cent". Fanning out from the trail outposts, miners began creating colorful desert settlements that went through boom-bust cycles until the end of the century. By 1868, with the subduing of the native population, most of the major modern California Desert land uses had become entrenched in some form: livestock grazing, mining, military bases, major transportation arteries, and the growth of permanent settlements. Railroad facilities and mining operations, mainly those for precious metals but also for the celebrated borax trade, had substantial, although often ephemeral, impacts. Ranchers grazed their livestock across a wide expanse of the Desert, at one time almost its entire western portion.

After the turn of the century the dominance of these activities was challenged when the construction of a canal from the Colorado River transformed "The Land of the Dead" into the lush Imperial Valley, now one of the most productive agricultural spots in the world. Anticipating its destiny, the City of Los Angeles brought water across more than 200 miles of the Desert from the Owens Valley, presaging a number of large water projects to come.

Between two world wars, the free-wheeling days of the prospector waned as

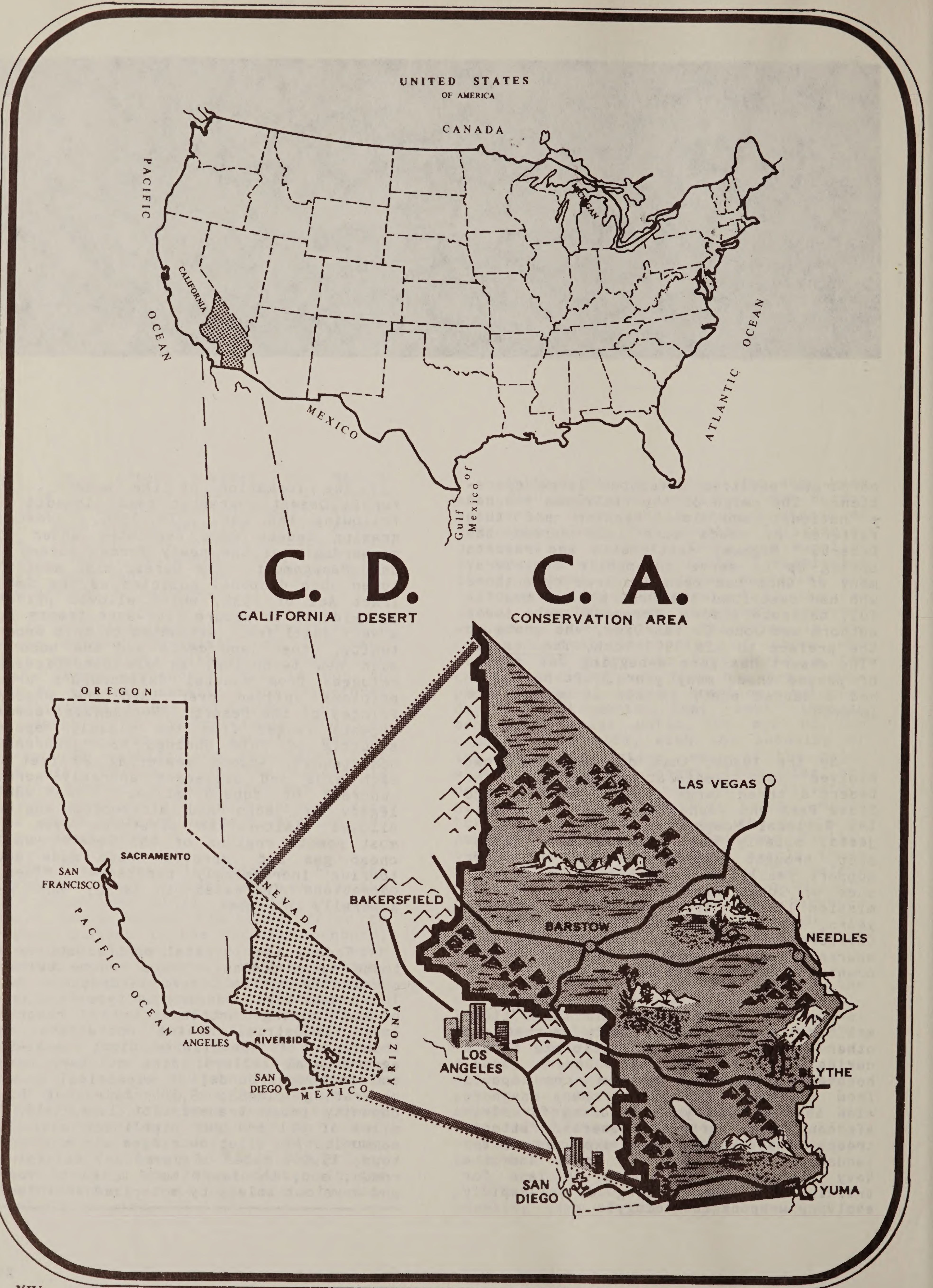
corporate entities developed large operations. The reign of the railroads reached a national and local zenith and then faltered as roads were laid across the Desert. Highway settlements and resorts sprang up to serve automobile travelers, many of whom had been inspired by authors who had described the Desert as a beautiful, delicate place. Foremost among these authors was John C. Van Dyke, who wrote in the preface to his 1901 book, The Desert: "The desert has gone a-begging for a word of praise these many years. It has never had a sacred poet; it has in me only a lover."

By the 1930s, this new sentiment had evolved into legislation creating the Desert's three large parks: Anza-Borrego State Park and Joshua Tree and Death Valley National Monuments. More water projects, notably the Colorado River Aqueduct, brought pumping stations and other support facilities, and the first appearance of long, high voltage power transmission lines. After an absence of many years, the military was lured back to the California Desert sun, clear air and sparsely-settled landscape because of the country's new interest in flying.

As they did elsewhere in the nation, military concerns dramatically usurped all other activities in the California Desert during World War II. The Desert lands, however, experienced perhaps more impacts from military operations than anywhere else in the country. Preparing for North African tank warfare, General Patton's troops ranged across vast expanses of the landscape. The Army Air Corps and the Navy withdrew large tracts of land for training and the testing of a rapidly evolving weapons technology.

The formation of the modern California Desert character began immediately following the war. In 1946, livestock grazing became more regulated under the stewardship of the newly formed Bureau of Land Management. The Bureau also administered such disposal policies as the Small Tract Act of 1938, which allowed private individuals to secure five-acre tracts for a very small fee. Attracted by this opportunity, other land deals and the boon of such new technology as air conditioning, refugees from coastal California's urban problems spilled over into the western fringes of the Desert. Residential developments ranged from the closely- spaced suburbia of Palm Springs to "jackrabbit homesteads", shacks measuring 20 feet on each side and dispersed sparsely across hundreds of square miles. The war's legacy of jeeps and air-cooled engines allowed visitors to penetrate even the most remote regions of the Desert, while cheap gas and improved roads made auto touring increasingly popular. Mineral operations increased in size, but not generally in number.

Today, the physical manifestations of these human pressures have become evident across the entire Desert landscape: over 100 communities, ranging in type from one-person mining settlements to resorts; large industrial mining operations and thousands of speculative digs; canal-fed agricultural valleys; nine military bases and testing grounds; 11 electrical power-generating plants; 3,500 miles of high capacity power transmission lines; 12,000 miles of oil and gas pipelines; over 100 communication sites on ridges and mountaintops; 15,000 miles of paved and maintained roads; and, thousands more miles of roads and ways cut solely by motorized vehicles.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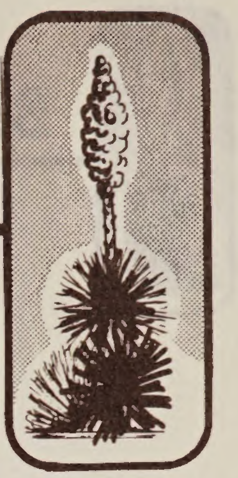
C. D. C. A.
CALIFORNIA DESERT CONSERVATION AREA
OREGON
NEVADA
ARIZONA
SACRAMENTO
SAN FRANCISCO
PACIFIC
OCEAN
LOS ANGELES
RIVERSIDE
SAN DIEGO
MEXICO
LAS VEGAS
BAKERSFIELD
BARSTOW
NEEDLES
LOS ANGELES
BLYTHE
SAN DIEGO
YUMA

Final Environmental Impact Statement

I. Purpose of and Need for Action



A. Need for Action

As described in the "Perspective" section, there are enormous basic conflicts in the CDCA between a natural environment that is both sensitive and complex, and the human social demands on that environment, that are equally sensitive and complex.

Over time, as demands have increased, these conflicts have also increased until, today, all competing uses cannot be fully accommodated. Resolutions must be reached and tradeoffs must be developed. The public must assume its share of the responsibility for the public lands in the CDCA, and BLM must be accountable to the public for its management of those lands.

The 25 million acre CDCA contains over 12 million acres of public lands, the controlling factor in the use and protection of the CDCA. As a first step toward a mechanism for resolution of conflicts, Congress enacted the Federal Land Policy and Management Act of 1976 (FLPMA), directed BLM to inventory CDCA resources and prepare a comprehensive land use management plan for the area. The 12 million acres of public lands administered by BLM are half of the CDCA. Preparation of a plan to resolve conflicts recognized by the public and the Congress must also take into account the effect that BLM management on public lands would have on the rest of the lands in the CDCA.

Section 601 of FLPMA requires that BLM develop a plan to "...provide for the immediate and future protection and administration of the public lands in the California Desert within the framework of a program of multiple use and sustained yield, and the maintenance of environmental quality."

Section 601 of FLPMA is reproduced in its entirety in the References section of this document. Section 103 of FLPMA defines the terms "multiple use" and "sustained yield" as follows:

> "The term 'multiple use' means the management of the public lands and their various resources values so that they are utilized in the combination that will best meet the present and future needs of the American people; making the most judicious use of the land for some or all of these resources or related services over areas large enough to provide sufficient latitude for periodic adjustments in use to conform to changing needs and conditions; the use of some land for less than all of the resources; a combination of balanced and diverse resource uses that takes into account the long-term needs of future generations for renewable and nonrenewable resources, including, but not limited to, recreation, range, timber, minerals, watershed, wildlife and fish, and natural scenic, scientific and historical values; and harmonious and coordinated management of the various resources without permanent impairment of the productivity of the land and the quality of the environment with consideration being given to the relative values of the resources and not necessarily to the combination of uses that will give the greatest economic return or the greatest unit output."
>
> * * *
>
> "The term 'sustained yield' means the achievement and maintenance in perpetuity of a high-level annual or regular periodic output of the various renewable resources of the public lands consistent with multiple use."

So, multiple use, sustained yield and the overall maintenance of environmental quality are the context for CDCA management, and all other public land management laws must be viewed within this context, including the following:

- Mining Law of 1872
- Mineral Leasing Act of 1920
- Taylor Grazing Act of 1934
- Wilderness Act of 1964
- Historic Preservation Act of 1966
- Mining and Minerals Policy Act of 1970
- Wild Free-Roaming Horse and Burro Act of 1971
- Endangered Species Act of 1973
- Sikes Act of 1974
- Rangeland Improvement Act of 1978
- Executive Orders 11644 and 11989 (Off-Road Vehicle Management - issued 1972 and 1977, respectively).

Congress has said the first step is the preparation of a comprehensive long-range plan for management, use, development, and protection of the public lands in the CDCA.

B. Purpose of Action

The purpose of the action -- developing the plan -- is to be responsive to the legislative mandate in Section 601 of FLPMA:

> "The Secretary of the Interior . . . . shall prepare and implement a comprehensive, long-range plan for the management, use, development, and protection of the public lands within the California Desert Conservation Area. Such plan shall take into account the principles of multiple-use and development, including, but not limited to, maintenance of environmental quality, rights-of-way, and mineral development. Such plan shall be completed and implementation thereof initiated on or before September 30, 1980."

It is clear that the plan must provide general, regional guidance for management of the CDCA over at least a 20-year time period. This general plan will be at the top of a hierarchy and provide the framework for subsequent plans for specific resources and uses, development of site-specific programs or project action, and be responsive to specific land use requests.

Therefore, to be a comprehensive long-range plan and to be responsive to the legislative mandate, the Proposed Plan contains certain significant characteristics. They are:

1. Regional in scope, in that it considers the social and economic factors and land resources in a broad spectrum.
2. Multiple use and sustained yield in nature (considers all uses and especially renewable resources).
3. Broad guidance for land use management, to assist managers in developing subsequent Resource Management Plans.
4. The product of public involvement and participation in the entire decision-making process in that it reflects the desires and needs expressed by the public(s).
5. Effective in considering issues and resolving conflicts in that it surfaces all issues and, through an analytical process, resolves conflicts.
6. An evolving process permitting analysis of actions and impacts on a broad basis and providing a framework for ongoing analysis of specific subsequent plans, programs, actions, and impacts.

The environmental impacts of the Proposed Plan and the Alternatives were developed with these characteristics in mind.

Process and Development

II

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A. Summary of Process

The process and development of a California Desert Plan has been as important as the Plan itself, for there is no way that a single document can describe the enormous effort made in its development.

The process started with the hiring of expert desert scientists; the establishment of the Desert Planning Staff Office; and the beginning of one of the most intense resource inventories ever undertaken. The section on documentation describes in more detail the type of data and analysis made during this process, which lasted three years and cost $6 million.

In 1979, during the latter stages of inventory, the Draft Plan Alternatives -- No Action, Protection, Use, and Balanced -- were formulated and their impacts assessed.

Thanks, in large measure, to advance notification in the media, over 18,000 copies of the draft document were requested and distributed. There were 12 hearings and workshops attended by over 900 people. There were over 8,000 feedback responses containing over 40,000 individual comments.

The major public issues were formulated from the public comments and analyzed to develop the Proposed Plan. There will be a 30-day review of the Proposed Plan after which it will be submitted to the Secretary of the Interior in early December for a final decision.

There is a very important relationship between the Draft Plan Alternatives document and the Proposed Plan document. Given the amount of data and extensive review of the draft, and given the very high cost of printing color maps, etc., the Proposed Plan document will not be as "daunting" or complex as the earlier document. The approach taken in the Proposed Plan document is to keep the Draft Plan Alternatives as constant as possible, but to explain any changes; thereby being able to reference the draft rather than repeat data, and to use public issues as the basis for impact assessment for all alternatives because they reflect the major conflicts that need resolution in a comprehensive regional plan.

Yucca - Pinto Mountains

B. EIS and Plan Development

CONCEPTS IN THE DRAFT ALTERNATIVES

The EIS and Plan development process is understandably very complex. To provide orderliness it was necessary to develop a structure and use it as a basis for planning and environmental assessment. The structure is the basis for understanding and communicating about the Plan and EIS. The following describes the concepts of the structure and how it was used.

Three multiple use alternatives -- Protection, Balanced, and Use -- were considered during the draft phase. A No Action Alternative, required under the National Environmental Policy Act, was used as the point of origin, or baseline. These alternatives were all offered for public review as an acceptable range of multiple use possibilities on which to conduct impact analysis. A preferred alternative was not identified at the time and the Draft was developed because it was intended that the public review of the Draft Plan Alternatives should and would develop the Proposed Plan.

To frame the total pattern of land use activities in each Draft Plan Alternative, these planning components were devised: (1) Multiple-Use Classes and resource management guidelines for each class, (2) Plan Elements, and (3) Areas of Critical Environmental Concern (ACECs). Details about these components are found starting on page 17 of the Draft Plan Alternatives document.

Proposed broad regional resource uses in the Draft Plan Alternatives are addressed by a system of multiple-use classes: Class C (Controlled Use), Class L (Limited Use), Class M (Moderate Use), and Class I (Intensive Use).

Class C is designed to protect and preserve areas having wilderness characteristics described in the Wilderness Act of 1964. Class L protects sensitive natural scenic, ecological, and cultural resources, yet provides for low intensity multiple use that can be carefully controlled. Class M is designed to provide a wide variety of uses, yet mitigate damage to the most sensitive resources. Class I emphasizes development-oriented use of lands and resources to meet consumptive needs, yet provides appropriate mitigation and protection of sensitive, natural, and cultural values.

While the multiple-use class designation of an area may allow a number of types and levels of use fully consistent within the guidelines for that class, these uses may be totally incompatible in the same area at the same time. These conflicts, the major issues of the Plan, are addressed in plan elements. These residual conflicts occur in each multiple-use class as they are designed, although they would be most limited in Class C, with its dedication to wilderness preservation. The resolution of these conflicts and tradeoffs in use are fundamental to multiple use management. The task of the element is to resolve these conflicts within each class under the broader multiple-use class guidelines, or to establish procedures for resolving these conflicts as they are later identified during use of the Plan.

Nine plan elements were presented in the Draft. The Wildlife, Cultural Resource/Native American and Mineral Exploration and Development Elements provided information about the nature and location of a resource or activity, describing management efforts which would support that resource or activity; in addition, the Wildlife and Cultural Resource/Native American Elements identified subsequent active management plans to follow desert plan adoption. The Livestock Grazing and Wild Horse and Burro, Wilderness, Motorized Vehicle, Recreation, Energy Production and Utility Corridors, and Land Tenure Elements described decisions about the major tradeoffs in use which the objectives of the various alternatives have dictated.

Areas of Critical Environmental Concern (ACEC) is also a planning component that allows special consideration for protection of a distinctly rare or valuable resource that can be given adequate protection through special management plans during implementation. There are 73 ACECs in the Proposed Plan.

CONCEPTS IN THE DRAFT EIS

Given the basic structure of the Draft Plan Alternatives, the concept for environmental impacts was to assess the impacts from each plan element, or use, on each major resource for each alternative. This permitted a comparison of cumulative impacts between alternatives.

Impacts upon the following resources and activities were evaluated: Air Quality, Water Quality, Soils, Energy and Minerals, Vegetation, Wildlife, Cultural Resources/Native American Values, Wilderness, Visual Quality, Recreation, Domestic Livestock Grazing, Wild Horse and Burro, and Socioeconomic.

CONCEPTS IN THE PROPOSED PLAN

The structure of the Proposed Plan uses the same components as the Draft Alternatives and EIS: multiple-use classes, plan elements and ACECs. Within the Plan elements the importance of Native American values were recognized by separating them from cultural resources and creating a separate element to address these special needs. Similarly, the topic of wild horses and burros was separated from livestock grazing as a separate element, and vegetation was added as an element because of overwhelming public concern. The multiple-use class guidelines in the Proposed Plan, as in the Draft, control the type and degree of use and establish any constraints needed to meet the objectives for each multiple-use class. The public commented extensively on the guidelines; significant improvements have been incorporated.

For each element in the Proposed Plan there is a short statement of findings, the goals that the Plan establishes for the element, the specific actions proposed for that resource or activity, and an explanation of how the actions will be implemented.

The section on ACECs has been expanded to include proposed actions for other "special area" management categories.

A comprehensive section on total Plan implementation has been developed to respond to public concern about this critical aspect.

CONCEPTS IN THE FINAL EIS

The method of analysis in the Final EIS is similar to that in the Draft EIS, with one notable exception. Because the public review process served to identify major public issues, the impacts of these issues on the resources became the key to the basic assessment. This issue analysis was also applied to the Draft Plan Alternatives to permit a comparative analysis between those alternatives and the Proposed Plan.

There was extensive public comment on the Draft EIS. Those comments pointing out typographical, grammatical and internal inconsistencies were all evaluated and resolved in the Proposed Plan. These were perhaps the easiest to accommodate.

Concern about site-specific management was resolved through complete reanalysis of "open" areas, Wilderness Study Areas, and ACECs in the Proposed Plan.

Comments on the adequacy of the impact assessment of the alternatives ranged widely. Some felt the negative impacts of the Use Alternative had not been displayed as severe enough; others argued that impacts had been exaggerated. Similar divergence was typical of comments on the evaluation of impacts of the Protection and the Balanced Alternatives. Because no public concensus exists as to whether impacts had been overstated or understated, the impact analysis of the Draft Plan alternatives, coupled with the information submitted by the public, is considered adequate for decisionmaking. This identification of major issues through public review provided greater clarity and focus to the impact assessment of the final EIS. ■

C. Consultation and Review Comments

GATHERING PUBLIC INPUT

Underlying every facet of the charge for management of lands and resources given the Bureau by FLPMA is the requirement to obtain public involvement in all planning and management actions. BLM received great assistance in discharging this responsibility when the Act also provided for the California Desert Conservation Area Advisory Committee. Appointed by the Secretary in early 1977, the committee quickly became the focal point for public involvement.

Beginning in March, 1977 and proceeding through 1979, the Committee held a series of 15 forums inviting public participation. Subjects covered during these meetings with Desert residents and users were recreation, energy, power plant siting, utility corridors, geology, minerals, mining, cultural resources, grazing, animal resources, wilderness, and land exchanges.

BLM specialists also joined with the Committee in presenting results of the resource inventories to the public. Then, to make sure that the public could react, BLM held a series of feedback meetings with groups that had provided information on needs, desires, concerns, and values.

During this same period, BLM commissioned three opinion polls to determine how people felt about the Desert on desertwide, statewide, and national levels. All this information helped to provide a base upon which the Draft Plan Alternatives and Draft Environmental Impact Statement were built.

To prepare people for the publication of the complex draft document in February, 1980, a Draft Preview was published in December, 1979. This document was intended to give information on the scope, content, and background of the Draft, and to prepare people to comment on it. It also contained a postage-free mailer for use in requesting a copy of the Draft. The Draft Preview was mailed to the entire mailing list of nearly 4,000 addressees.

Concurrently with release of the draft on February 15, 1980, BLM placed display advertising in 26 California newspapers, announcing the availability of the document and the toll-free number which interested people could use to request a copy. Eventually, 18,000 copies were distributed.

During the 90-day comment period, February 15 - May 15, BLM, with the CDCA Advisory Committee taking the lead, held major hearings in the four metropolitan areas of Oakland, Sacramento, San Diego, and Los Angeles to obtain comments on the draft document. Additionally, eight hearing-workshops were held at locations in or adjoining the California Desert.

During the public comment period, meetings and briefings were also held with Federal, State, and local agencies, organizations and interest groups, to discuss issues and gain input.

From hearings, meetings, workshops, and written comments mailed in, over 8,500 separate inputs were received totalling about 40,000 separate comments.

Tabulation and analysis of the public comments was an important, complex task. It was carried out under the supervision of knowledgeable BLM staff members who had worked on and understood the Draft document. Results of the analysis and tabulations were stored in a computer for later retrieval. The process of analysis and tabulation was audited by a team from the California League of Women Voters, which had agreed to perform the audit to ensure that the public comments received on the Draft were analyzed thoroughly and impartially, and were fairly presented in a form that would provide the fullest opportunities for consideration in the decision-making process. The team reviewed the process that prepared the input for analysis. This included sorting comment documents, assigning documents for analysis categorization, and coding of documents. The report of the League's team, along with a summary of the comments, are contained in Appendix I.

USE OF PUBLIC INPUT

Following analysis and tabulation of the comments, issues raised were subjected to a series of reviews in order to produce recommendations for development of the Proposed Plan.

The first review was performed by a Steering Committee, composed of the BLM State Director, Desert Plan Director, and the District Managers of the Bakersfield and Riverside Districts. The Steering Committee considered issues ranging from dominant, general trends in public opinion to technical discussions of specific sites or resource problems. Their first concern was to determine whether the issue under consideration could be addressed within the scope of the Proposed Plan. Issues requiring specialized analysis were referred to a BLM Plan Development Team, composed of interdisciplinary specialists. The Plan Development Team developed analysis of these issues, complete with options, impacts from the options, and team recommendations, and returned them to the Steering Committee. From the Plan Development Team's efforts, the Steering Commitee formulated preliminary plan possibilities which considered land situation and resource capability, law and policy compliance, national, regional, and local goals, and their own professional judgment of management feasibility.

The Steering Committee's recommendations were presented to the CDCA Desert Advisory Committee for review to assure that both public input and the results of the resource analysis of the Plan Development Team were adequately considered.

The agreed-upon recommendations, along with the now narrowed range of unresolved issues, were presented to the BLM Management Review Team for final decision or approval. This team consisted of the BLM California State Director, the Associate State Director, and representatives from the Bureau's Washington Office. Developed criteria, recommendations and analyses provided a basis for decision, with legal and policy compliance, management feasibility, and balancing of national and regional goals as primary factors. Multiple-use class assignments and desertwide management priorities and direction were thus established.

Table II-C-1

Schedule of Major Events

EVENT	DATE
·Desert Plan Staff established; Resource Area inventories	Early 1976
·FLPMA became law; DPS shift to desertwide inventories	Oct. 1976
·Desert Advisory Committee chartered/appointed	Early 1977
·DAC conducts public seminars/meetings	1977-1978
·Wilderness Inventory completed	Early 1979
·Inventory and analysis for Draft Plan completed	Mid-1979
·Draft Alternative and EIS published	Feb. 1980
·End of 90-day public comment period on Draft	May 1980
·Analysis of public comments completed	July 1980
·Proposed Plan (draft) reviewed by DAC	Aug. 1980
·Proposed Plan and Final EIS published	Sept/Oct 1980
·Desert District assumes CDCA management	Oct. 1980
·Conduct 12 briefings/hearings on Proposed Plan	Oct. 1980
·End of 30-day public comment completed	Oct/Nov. 1980
·Analysis of public comments completed	Mid-Nov. 1980
·DAC review of comments/issues	Mid-Nov. 1980
·Completed workup of Final Plan	Late Nov. 1980
·Brief Director and Assistant Secretary	Early Dec. 1980
·Approval of Final Plan	Early Dec. 1980
·Publish Final Plan	Early 1981

D. Major Issues

The public comments on the Draft document made it clear that concern was focused on a number of major issues in the California Desert. Systematic analysis and review further refined these issues and the conflicts which created them. Resolution of these issues was a determining factor in the development of the Proposed Plan.

The major issues fell into two groups -- resource and procedural. Resource issues directly affect what the Plan will do; i.e., what the management guidance for CDCA public lands will be. Procedural issues affect how the plan is developed, and how it will be put into effect. Put another way: resource issues are action-oriented; procedural issues are process-oriented.

Section VI of this EIS is devoted to a summary of public comments on each of the issues and briefly describes actions taken in response to them. Appendix I explains the public comment review process, and presents representative samples of comments received.

A list of, and brief statement about, each issue addressed in the Proposed Plan, or used in the development process for the final document follows:

1. RESOURCE ISSUES

Vehicle Access and "ORVs"

The Draft did not clearly differentiate between vehicle access to the Desert on roads and trails and vehicle "free play" and cross-country travel. The term "Off-Road Vehicle" (ORV) is imprecise. Extreme pro and con positions have been taken regarding "ORVs." There is gneral agreement regarding the need for vehicle access to the Desert; great disagreement regarding the degree and methods of managing and controlling that access.

Wildlife Protection

Concern about the impacts of human use in the Desert is stated in terms of limiting or prohibiting uses to protect wildlife. Rare, threatened, or endangered species must be protected. Important wildlife habitat must be safeguarded. Unreasonable wildlife protection eliminates important economic and recreational uses.

Wilderness

How much wilderness is enough? Wilderness proponents seek broad and representative wilderness areas on the public lands in the CDCA. Users who would be limited or precluded, particularly miners, ask for fewer and non-conflicting areas. Military concern was expressed about impacts of wilderness on air space.

ACECs

Areas of Critical Environmental Concern (ACECs) are generally supported. Protection-oriented comments favor as many and as large ACECs as possible. Consumptive users favor fewer designated ACECs and smaller areas that include only the most critical area.

Mineral Exploration and Development

Keeping as much land area as possible available for mineral exploration, with minimum reasonable constraints on economic development, is a concern of some, while others favor limiting available areas and providing rigid controls to ensure the protection of sensitive resources.

Energy and Utilities

There is a disagreement about the number of utility corridors needed to meet projected utility needs at reasonable cost and reliability while fully protecting sensitive locations. There are strongly voiced concerns about the need for proper environmental review and controls before power plant sites are provided in the CDCA.

Burros

Overwhelming concern was expressed about the impacts from high numbers of burros in the CDCA. Concern was expressed that proper positive management for burros be provided. It is generally believed that funds will be provided for BLM to round-up and adopt burros before serious and irreversible damage to resources occurs.

Livestock Grazing

Providing grazing areas and levels sufficient to maintain the economic stability of the livestock industry on public lands in the CDCA while maintaining or improving rangeland conditions, is the main concern of the industry. There is also a major dispute about the effects of livestock grazing on natural systems, particularly wildlife.

Cultural Resource Protection

Potential irretrievable loss of historic, cultural, and Native American resources and values is a major concern. Both direct impacts from economic users, as well as possible indirect impacts from burro presence and vandalism are feared. Users agree that protection of these resources is important, but feel that the constraints proponents seek are unreasonable.

Recreation

There is a major, direct conflict between non-impacting users (nature study, hiking) and comsumptive users (motorcycle racers, vehicle enthusiasts). For this reason, not enough emphasis or effort has been placed on proper management opportunity between these two extremes for many general recreation uses. The Desert is a place for solitude and adventure. These values are impacted by overuse as well as misuse, and by excessive regulation.

2. PROCEDURAL ISSUES

Adequacy of Alternatives

The range of alternatives was not considered adequate because the Protection Alternative was believed to be not "protective" enough. It was felt the Balanced Alternative was not truly "balanced" between the Protection and Use Alternatives. No "Preferred Alternative" was included in the draft and was desired by some.

Ecosystem Analysis

Little evidence of understanding and analysis of ecosystems in the Desert was provided in the Draft. Decisions and planning should have been on the basis of ecosystems.

Documentation

Not enough information on wilderness or ACEC decisions was provided. Description of information about mineral and other inventory and methods was inadequate. Appendices were inadequate, and not available when needed.

Size and Complexity of Draft

It was felt that the Draft was too big and bulky and too complex for general public understanding or comment. It was also stated that not enough information, detail, and back-up was provided.

Impacts Over or Understated

The treatment of impacts was uneven. Impacts will occur which were not included in the Draft. Draft impacts were overstated and will not occur.

Implementation

Implementation schedules, priorities, and funding levels were not explained in enough detail. Key programs would not be implemented soon enough. Implementation would be impossible because funds would not be provided, causing greater impacts to occur.

E. Completion of a Final Plan

PUBLIC REVIEW OF FINAL EIS AND PROPOSED PLAN

Publication of the California Desert Plan and Final Eis will initiate a 30-day public review period. A series of briefing-hearings is scheduled to receive comment on the document from October 14 to October 22. Written comments will also be sought during the entire public review period, which ends November 1. Analysis of public comments will be completed and a summary presented to the CDCA Advisory Committee at their meeting scheduled for November 17-18. By November 28, necessary changes and revisions will be completed, and the Director and Assistant Secretary will be briefed on the proposal. December 8 is the date scheduled for delivery to the Executive Secretariat, for Secretariat consideration.

DECISION

Following the final decision, the California Desert Plan will be implemented by the BLM California State Director. The Plan will then be published and distributed to agencies, organizations, educational institutions, and individuals.

The Department of the Interior has determined that the Assistant Secretary for Land and Water Resources will make the decision on approval of a California Desert Plan. This authority has been delegated by the Secretary, who was granted the authority under Section 601 of FLPMA. Therefore, the approval will be the final administrative decision of the Department and no protests are possible. The language on page 21 in the Draft Plan Alternatives document concerning the protest process was printed prior to determination as to which official within the Department would make the final decision. BLM regrets any confusion caused by the previous language.

It is important to note that approval of the Plan will not preclude individuals from filing administrative appeals on later decisions affecting existing rights or authorized uses; e.g., grazing permits.

SUBSEQUENT PUBLIC INPUT

The Final Plan will not be a static, fixed arrangement. It establishes the process and framework for future program and project plans over time. The public is invited to review all subsequent plans and EIS.

The Plan will be amended many times. It must be dynamic to meet the needs that none of us can foresee or project. The future of the Desert is what we continue to make it day by day. BLM intends the shaping of this future to be an open process whereby the public exercises its responsibility for active participation in public land management.

F. Documentation

The foundation of this Plan is the extensive data collection and analysis, including analysis of public comments, that was conducted prior to its formation. Documentation of the complete process was maintained in order to have this valuable data available for use by resource managers during implementation of the Plan.

Examples of documentation are:

A. Field inventory data completed by BLM resource personnel and contractors. These include extensive files developed by resource specialists.

B. Bibliographies that were considered during the process.

C. Appendices developed and printed for the Draft Plan Alternatives and for the Proposed Plan.

D. Documentation of the public review process, including transcripts of public meetings, tapes of public meetings, public correspondence, and computer analysis.

E. Transcripts of Desert Advisory Committee meetings.

F. Internal working papers of the decision process for the development of the Proposed Plan, including:

   1. Issue Sheets describing major issues as expressed in public review of the Draft Plan Alternatives.

   2. Transcripts and tapes from workshops and meetings.

   3. Issue resolution papers developed on major issues.

   4. Steering Committee notes on issue review and recommendation.

   5. Management review and documentation of decisions reached for the Proposed Plan.

Two systems for the storage and retrieval of the above data have been developed: the library system and the computer data base management system.

The library will contain copies of all inventory reports prepared by BLM staff and contractors, and all reference material acquired during this program. In addition, all transcripts, tapes, decision documentation, public documentation and appendices will be catalogued in the library. The maintenance and use of the library will be an important function of the implementation phase of the California Desert Plan. It is also expected that the library will become an important reference tool for individuals or agencies having need for desert resource information.

The data base management system has been established to capture the large volume of resource data collected during the inventory phase. This includes alpha/numeric information with geographic referencing which makes possible the output of selected area through what is termed a "window program". The data base includes information on wildlife, vegetation, archaeological and historic sites, recreation, and minerals. In addition to staff-generated files, the system also includes files created by contractors. Managers who will be impementing the California Desert Plan will be able to use and update easily this large volume of information.

Alternatives Considered

III

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A. Development of Alternatives

As directed by the National Environmental Policy Act for such major actions as the California Desert Plan, four alternatives for achieving the goals set out in Section 601 of FLPMA were presented in draft form, for public review and comment: No Action, Protection, Balanced, and Use. A full discussion of each alternative can be found in the Draft Plan Alternatives and Draft EIS document published by BLM in February, 1980.

The formulation of the Proposed Plan is a result of the evaluation of public issues stemming from the public review process on these alternatives. The purpose of this section is to highlight the alternatives discussed in the draft document and to compare those alternatives with the Proposed Plan.

Subalternatives were also developed and discussed in the Draft Plan Alternatives: no grazing, reduced grazing. and proposals for expanding several park areas. These subalternatives were considered, along with the Draft Plan Alternatives, in developing the Proposed Plan.

Public comments also revealed the need to re- examine the Draft Protection Alternative, particularly to determine if it contained aspects that would provide for additional protection and still be within the context of multiple-use.

The original intent was to adjust the Draft Protection Alternative in the Final EIS document, and to discuss the impact and concerns at that point. However, the issue review process on the Draft resulted in being able to resolve all of the major public concerns about the Protection Alternative through the Proposed Plan. The following is a discussion of that process, and the results of incorporating more protection issues in the Proposed Plan. This process precludes the need for changing the Draft Protection Alternative.

Several comments stated that there was lack of adequate protection for rare, threatened, or endangered species in the Land Tenure Adjustment Element of the Protection Alternative. The Proposed Plan stipulates that no public lands will be transferred without a full assessment of the impact of any land tenure adjustments on these species.

There was some concern about the impacts that livestock grazing would have on wildlife in the Protection Alternative. BLM conducted an assessment of "no grazing" in the Draft which covered these concerns.

Adequacy of the Protection Alternative analysis of motorized vehicle "free play" was a concern. The Proposed Plan separates the Recreation and the Motorized Vehicle Access Plan Elements so that the analysis of "free play" impacts is more specific and more complete.

There was also concern about the adequacy of analysis of impacts on cultural resources. The BLM has already signed two documents covering this concern: "Memorandum of Agreement Pertaining to Bureau of Land Management California Desert Conservation Area Policy for Coordinating Native American Reservation Tribal Review of Environmental Impact Documentation Among Native American Heritage Commission and Bureau of Land Management, California" and a "Memorandum of Understanding Pertaining to Bureau of Land Management, California, Policy for Native American Concerns and Cultural Resources." Currently, the Bureau is also negotiating completion of the following document: "Programmatic Memorandum of Agreement Between Department of the Interior, Bureau of Land Management, California, the California State Historic Preservation Officer, and the Advisory Council on Historic Preservation." These agreements and the Memorandum of Understanding are reprinted, in their entirety, in Appendices VII and VIII of this document. They have been incorporated in the Proposed Plan to assure adequate analysis of cultural and Native American resources.

There were comments oriented toward the guidance provided in several Executive orders. All alternatives, including the Proposed Plan, are within the range of the Executive Orders covering off-road vehicles, flood plain management and water quality. In summary, comments concerning the adequacy of the Protection Alternative were reviewed, issues were analyzed, and all major concerns accommodated in the Proposed Plan.

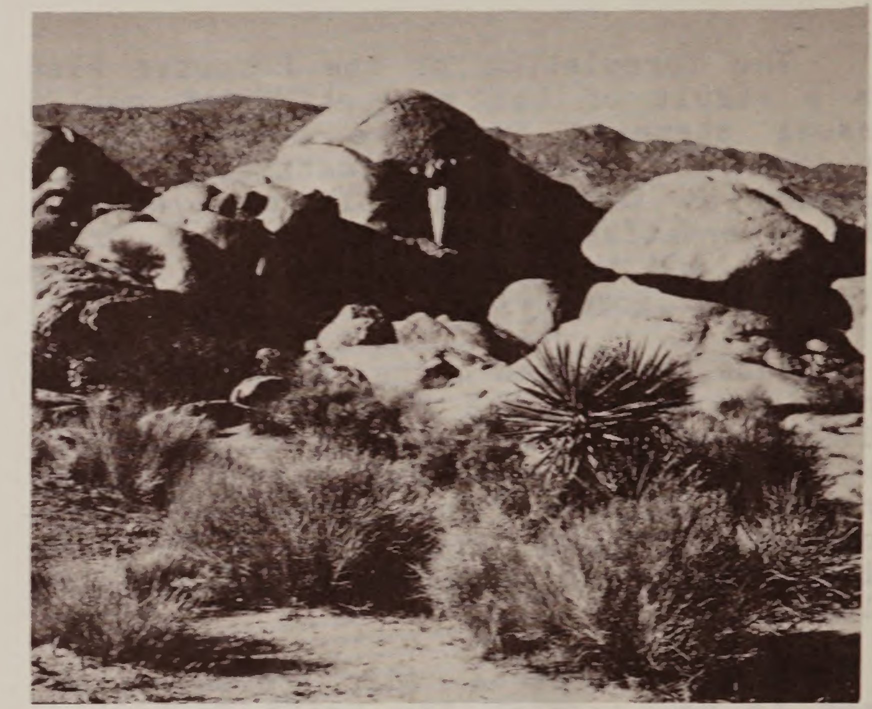
B. Description of Alternatives

The following is a brief description of the alternatives. For a more complex description, the reader should consult the Draft Plan Alternatives and EIS document, particularly pages 32 through 49, each of the Plan Element Alternative sections, and the multiple-use class maps in the front cover pocket of that document.

NO ACTION

The No Action Alternative is the continuance of present management practices in the CDCA in the absence of a long-range, comprehensive plan. This alternative is a legally mandated alternative for EIS evaluation under the Council on Environmental Quality regulations which interpret the Natural Environmental Policy Act. For some types of proposed actions, such as power plant projects where a possible "go" or "no go" decision can be made, the No Action Alternative can be a valid management option. However, this alternative is not, in its entirety, a valid option under BLM's Congressional Mandate for the development of a comprehensive land use and resource management plan for the CDCA. In other words, BLM cannot choose not to prepare a plan.

Salt Marsh



Bobo Springs area near Pipes Canyon

However, the No Action Alternative is useful to the planning effort because it provides a benchmark by which to measure the environmental consequences of other alternatives. As one method of comparison, present management actions are translated into the multiple-use classes designations proposed for the Plan. This No Action Alternative simulated multiple-use class map appeared in the Draft Plan Alternatives document. The distribution of classes are: 1) No Class C, as no wilderness study areas have been established; 2) 36.3 percent of BLM-administered lands receiving limited use, protective-oriented management similar to Class L; 3) 53.6 percent managed for moderate multiple use as in Class M; 4) 7.8 percent open to intensive, consumptive uses in Class I status, and; 5) 2.3 percent unclassified in scattered amounts.

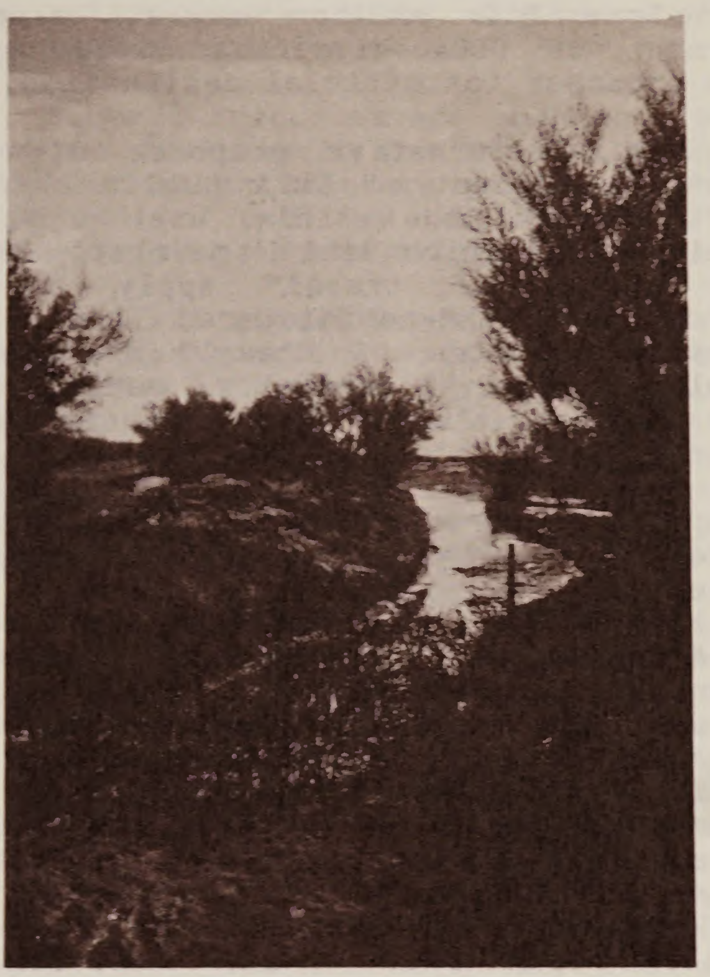
The key difference between this and other alternatives is that such classifications would not guide future management, since no comprehensive, long-range plan would be established. Land use decisions would result from individual consideration of each proposed action, reflecting a management stance that is more "reactive" than "active." Since the implementation of NEPA, such decisions have been increasingly oriented towards environmental protection. However, in the absence of plan guidance, a major demand for energy development could reverse this trend.

As is apparent from the element-by-element comparisons of major plan actions that follow on Table III-B-2, there would be as much "action" as "no action" under this alternative.

There would, of course, be no wilderness or ACECs for fragile resource protection established. Cultural and Native American value protection would not be accomplished by special management designations, but considered on a case-by-case basis as a reaction to other proposed uses. Similarly, little provision is made to resolve conflicts on a desertwide basis between recreationists with differing objectives. The California Desert would be very accessible to motorized vehicle use with only 5 percent of BLM-administered lands closed to such use. In contrast, only 5 percent would be completely open. Sixty-two percent would be limited to use of "existing routes of travel" and 28 percent to "approved routes of travel." The approved access allowed by these designations is explained in the Motorized Vehicle Element.

New transmission facilities would not be limited to planning corridors, and most identified alternative energy areas (see Energy Production and Utility Corridors Element of the Draft Plan and the G-E-M Element of the Proposed Plan) would be open for development. Approximately 60 to 70 percent of all mineral potential identified would be accessible for exploration and development under limited to moderate controls. Federal and State-listed species of wildlife would continue to be protected from conflicting uses, but those species designated or proposed as sensitive would continue to be vulnerable in over 50 percent of their habitats. There would be no new habitat management plans or further special management designations to protect wildlife other than those now in process of completion.

Livestock grazing would continue to run well above the vegetation carrying capacity on the perennial ranges, but would be adjusted within limits on the ephemeral range. Wild horses and burros, especially the latter, would continue to increase in number, degrading rangelands and impacting other resource values. The BLM Adopt-A-Horse Program would have a great difficulty in keeping pace with population increases.



Amargosa River

Finally, since a comprehensive land tenure adjustment program does not exist, State, private and Federal interests in making exchanges for common good would not be met.

PROTECTION

The Draft Protection Alternative is a multiple-use alternative, but is oriented towards maximum preservation of natural and cultural values, with emphasis on protecting fragile resource values.

About 43 percent of BLM-administered public lands are recommended for Class C, or wilderness, designation; 49 percent of the land falls in the restrictive Class L; and only 4.6 percent and 1.2 percent fall in the moderate and intensive use classifications, respectively. About 2.2 percent is in scattered unclassified land patterns.

The element-by-element comparison of major plan actions by alternative (Table II-B-1) shows the protective strength of this alternative even more. Ninety-seven percent of known cultural and Native American values fall within protection-oriented class designations. Protecting specific critical cultural resources and Native American values is proposed.

Some 5.2 million acres, over 91 percent of CDCA Wilderness Study Areas, are proposed for official designation.

This alternative proposes that less than one percent of CDCA public lands be left "open" to vehicle use. Vehicle designations which limit travel to "existing routes of travel" apply to five percent of BLM-administered lands. The "approved routes of travel" designations would occur on 49 percent of public lands, and 43 percent would be closed to vehicle entry.

The protective value of management under this alternative favors "resource-oriented" recreational opportunities, such as hiking and sightseeing over more motorized vehicle-oriented areas. About 98 percent of the Desert visual resources rated high quality would fall within Classes C and L. Additionally, a subalternative of the Protection Recreation Element proposed an intensive study of the feasibility of establishing a 1.4 million acre Mojave National Park under National Park Service administration.

Fifteen utility planning corridors are provided; these are minimally sufficient to adequately handle projected future demand. Alternative energy development would be very limited, as most potential sites fall within the tightly controlled Multiple-Use Classes C and L.

Ninety-two percent of locatable mineral potential, 90 percent of leasable and 93 percent of saleable mineral potential is subject to stringent restrictions for exploration and development.

Multiple-use class designation is favorable for protection of all Federal and State-listed wildlife species and usually 90 percent or more for sensitive and significant species. (A feature in the Land Tenure Adjustment Element which was potentially detrimental to officially listed species has been corrected in the Proposed Plan.) Thirty-one Habitat Management plans are proposed and 25 ACECs covering about 279,000 acres will afford critical wildlife protection.

At about 25 percent below present perennial level, livestock grazing is reduced to within range carrying capacity. Two grazing subalternatives are also proposed: one eliminates grazing entirely from the Desert; the other further reduces grazing in the allotments where residual competition with wildlife exists.

Wild horse and burro numbers are decreased to half of present levels.

Finally, an ambitious land tenure adjustment program proposes the acquisition of up to a potential 2.4 million acres to protect ACECs and consolidate ownership within wilderness areas.

BALANCED

This alternative was designed to provide a wide variety of uses within the sustained yield capabilities of Desert resources. It was not meant to be a perfect balance between other alternatives, but a representation of how conflict and tradeoffs could be made between uses, without any predetermined management philosophy, other than to establish an initial attempt at a balance of uses.

The multiple-use class distribution for the Balanced Alternative illustrates the extent of that balance on an areal classification basis. About 15 percent of BLM-administered public lands are proposed for wilderness designation and protected by Class C guidelines. Forty-three percent of this land falls into the limited use Class L, 35.7 percent into Moderate Use Class M, and 3.4 percent in Intensive Use Class I. Some 2.4 percent of scattered BLM lands are unclassified and subject to management on a case-by-case basis.

Fifty-six percent of known cultural resources and 79 percent of Native American values occur within classes giving moderate to high protection. Thirty-one ACECs which include archaeological and Native American values are proposed, as in all Draft Plan Alternatives.

About 1.8 million acres, or 39 percent of wilderness study areas, are recommended as suitable wilderness areas.

Motor vehicle access in this alternative: about 2.4 percent is open to off-road use in 13 open play areas; 15.8 percent is closed to vehicle access. The remaining 79.4 percent is divided about equally between designations of "approved routes of travel" and "existing routes of travel."

Twenty transmission corridors are provided. About half the known geothermal and wind potential power siting areas are open to development. Approximately 40 to 50 percent of known mineral resource potential on public lands is open to exploration and development under moderate controls; the remainder is subject to stringent restrictions.

The habitats of most Federal and State-listed wildlife species fall entirely within protective classifications and, generally, from 50 to 90 percent of the habitats of sensitive and proposed sensitive species are protected by these classifications. Twenty-six Habitat Management Plans and, as in all Draft Plan Alternatives, 25 ACECs covering nearly 279,000 acres are proposed.

Livestock grazing is curtailed to be within the carrying capacity of its perennial range, reduced about 20 percent from current allocations. Wild horse and burro populations are decreased slightly below half their present numbers, or slightly below the levels proposed for the Protection Alternative.

Up to 1.3 million acres are proposed for acquisition in this element, less than half of the potential recommended in the Protection Alternative, with its more extensive Class C area. Lands for potential disposal total about 296,000 acres, an amount which varies little in the other Draft Plan Alternatives.

USE

The Use Alternative focuses on meeting human demands by obtaining the highest degree of consumptive use and production that desert resources are capable of providing, while meeting all environmental protection standards within the multiple-use content.

Only about 5 percent of BLM-administered lands in the California Desert are recommended for wilderness designation and 17 percent in the restrictive Class L. About 62 percent of the land is available for Moderate Use (Class M), and about 13 percent is in the Intensive Use Class I designation. Two and one-half percent falls in unclassified scattered land pattern areas.

An examination of the element-by-element comparison of major plan actions by alternative (Table II-B-I) reveals the accommodation of the Use Alternative to minimally restricted productive and consumptive uses.

Of known archaeological and Native American values in the CDCA, only 24 percent and 39 percent respectively, are afforded protective class designations, although 31 ACECs include the most critical of these values.

The recreational opportunities spectrum, described in the Recreation Element, is tilted toward the concentrated and moderately concentrated recreation uses, with only 5 percent oriented to wilderness uses. About 600,000 acres are proposed for wilderness designation. Twenty areas, totalling over 1,300,000 acres, are open for off-road vehicle play.

About 10.8 percent of BLM- administered public lands are completely open to vehicle use, 64.7 percent is available on "existing routes of travel," 16.4 percent on "approved routes of travel," and only 5.6 percent closed to vehicle entry.

With 28 utility planning corridors, this alternative provides the most options for routing transmission lines. It leaves alternative energy plant siting opportunities virtually unlimited.

Mineral resources are open to exploration and development for mineral resources may occur under moderate controls on 80 to 90 percent of public lands administered by BLM, depending on the category of mineral.

Wildlife protection afforded by Class C and L designations exists on about half the habitat of federally listed species and covers from 4 to 85 percent of the habitat of various State-listed species. Class protection afforded various designated and proposed sensitive species ranges from 9 to 59 percent.

Fourteen Habitat Management Plans are proposed, but, as noted previously, the 25 ACECs which include wildlife values are proposed in all Draft Plan Alternatives.

As in the other action alternatives, livestock grazing allocations of perennial range are reduced to fall within range carrying capacity, although by 17 percent instead of 10. Wild horse and burro populations will be more than halved, a reduction slightly greater than in the Balanced Alternative.

About 303,000 acres are proposed for potential disposal in this alternative, while some 813,000 acres are proposed for potential acquisition.

PROPOSED PLAN

As mentioned in the Development of Alternatives section, the Proposed Plan is the result of an intense evaluation of public issues as they related to each alternative in the Draft, including the subalternatives. Features of the Draft Plan Alternatives have been adapted for the Proposed Plan because of public coment; and this comment has also led to the development of proposals which were not advanced in the Draft Alternatives.

In proportions of land allocated to the various multiple-use classes, the Proposed Plan is most similar to the Draft Balanced Alternative. Approximately 17.1 percent of BLM-administered lands are Class C, 49 percent fall into Class L, 27.3 percent are in Class M, 4.1 percent in Class I, and 27.3 percent of scattered public lands are unclassified and subject to management on a case-by-case basis.

The primary difference between this distribution and that of the Draft Balanced Alternative is that the geographical location of the multiple-use classes has been readjusted in response to public input and reevaluation of the relation of known and potential resource conflicts. Additionally, strong demands for more allocations to the types and degrees of use permitted in Class C and Class I have been accommodated by an increase in these classes.

Sixty-six percent of cultural resource values are given high to moderate protection, and 47 Areas of Critical Environmental Concern will protect high archaeological and paleontological values. Native American values are considered in 8 areas of Critical Environmental Concern and a Plan Element has been developed to consider this need in future resource management decisions.

About 2.07 million acres in 43 Wilderness Study Areas are recommended as suitable for official designation.

About 4 percent of BLM-administered lands are "open" for vehicle use, 26.7 percent limited to "existing routes of travel," 48.2 percent limited to "approved routes of travel" and 18.6 percent "closed" to vehicle entry.

Recreational opportunities have been somewhat broadened at both ends of the intense-to-wilderness use spectrum from those provided in the Balanced Alternative.

The Proposed Plan calls for 16 Utility Planning Corridors, one more than is proposed in the Protection Alternative. The availability of known geothermal resource areas available for energy development falls between that of the Balanced and Use Alternatives.

Thirty percent of the CDCA will have moderate controls on mineral exploration and development, while 51 to 70 percent will have stringent restrictions. Congress must decide about mineral use in designating wilderness areas.

The habitats of Federal and State-listed wildlife species fall entirely within the protective classifications. Generally, 65 to 95 percent of the habitats of sensitive and proposed sensitive species are protected. A total of 59 Habitat Management Plans and 27 ACECs are proposed for the protection of wildlife species and habitats.

A Vegetation Element has been added to the Plan which focuses management attention on the protection of rare, threatened and endangered species, and the control of various consumptive uses of vegetation, including plant harvesting and potential new desert crops.

Livestock grazing is curtailed to well below the total carrying capacity in many areas for the protection of wildlife species. Wild horse and burro populations have been reduced significantly to maintain healthy herds and protect wildlife and other resource values. Levels established for burro populations are lower than any proposed in the Draft Plan Alternatives, in response to public comment.

A total of 73 ACECs have been proposed which will give special management protection to prevent irreparable damage to important historic, cultural or scenic values, and fish and wildlife resources.

Land tenure adjustment will occur according to the priorities set forth in the various plan elements. Transfers of land will be considered only after assessment of the impacts of any land tenure adjustments on rare, threatened, or endangered species.

C. Actions Taken on Alternatives

The four alternatives from the Draft Plan have not been altered as they are considered here. In response to the public review of these Draft Plan Alternatives, a Proposed Plan has been developed. The preparation of this Proposed Plan involved the careful review of possible actions described in the Draft, the evaluation of additional resource data, and re-analysis of potential management stategies in the context of input received from the general public and other Federal, State, and local agencies.

Areas with wilderness characteristics (WSAs), "open" areas, and Areas of Critical Environmental Concern (ACECs) have all undergone detailed analysis. An area-by-area review was conducted of all of these potential areas of special resource management concern. The recommendations for action in the Proposed Plan incorporate all available resource data in a desert-wide analysis of these values. WSA, ACEC, and "open" area recommendations in the Proposed Plan are designed to provide the highest level of resource protection and greatest opportunity for use of CDCA lands possible in a multiple-use land management program. Specific actions have been taken relating to the Endangered Species Act to ensure the protection of wildlife resources and values. These actions provide an additional level of wildlife protection while allowing the availability and accessibility of a full range of resource values.

Two major sub-alternatives in the Draft Plan Protection Alternative are not recommended in the Proposed Plan. The sub-alternatives were considered in the review and analysis of public comment for the Proposed Plan.

One of the Protection Alternative sub-alternatives considered the possible recommendation of a National Park in the eastern Mojave Desert. This area contains a wide spectrum of resources, including significant minerals, grazing lands, and other socioeconomic values, as well as superb scenery, and significant cultural and natural values. This diversity of resource values could be most effectively managed through a mix of Class L and Class C lands. These designations allow the most effective balance of protection and controlled limited use of the region. Wilderness recommendations and ACEC proposals are included in the Proposed Plan for the East Mojave. Many of the areas of unique resource value will be identified as special areas (National Landmarks, Recreation Lands, Research Natural Areas). These actions will provide the balance of protection and use prescribed by FLPMA and appear as recommendations in the Proposed Plan.

An additional sub-alternative of the Draft Plan Protection Alternative proposed the elimination of grazing in the California Desert. The objective of this proposal was to maximize the improvements of range condition and minimize the impacts on wildlife and wild horses and burros due to competition with livestock. In preparation of the Proposed Plan, carrying capacity was carefully evaluated. Recommendations have been formulated to adjust forage allotments, alter the existing schedule of many ephemeral and perennial/ephemeral allocations and eliminate livestock from areas of bighorn sheep habitat. The adjustments would allow ongoing grazing in the California Desert while avoiding the severe socioeconomic costs which would result from eliminating the grazing industry. The proposed actions for the protection of wildlife have been coupled with the recommended management of livestock forage levels of at least 25 percent below carrying capacity. Proposed management would allow range recovery and the protection of wildlife values in conjunction with effectively managed grazing in the CDCA.

D. Comparison of Major Actions

The following tables and narrative provide a quantitative comparison of major plan actions and features. Table II - D - 1 compares the multiple-use class designations for each alternative and the Proposed Plan. Table II - D - 2 provides a resource-by-resource summary of specific actions proposed in all alternatives and the Proposed Plan. This is followed by Section E, which compares major impacts of the alternatives. Part V of the Final EIS, Environmental Consequences, presents a detailed comparison of the impacts of the alternatives.

Table II - D - 1

Comparison of Multiple-Use Class Designations of the Four Draft Plan Alternatives and the Proposed Plan

Acres (000)
(Percent of total BLM-administered Lands shown in parenthesis)

Multiple Use Class	No Action Alternative	Protection Alternative	Balanced Alternative	Use Alternative	Proposed Plan
C	-	5,221 (43.0)	1,828 (15.1)	602 (5.0)	2,074 (17.1)
L	4,406 (36.3)	5,943 (49.0)	5,262 (43.4)	2,067 (17.0)	5,944 (49.0)
M	6,505 (53.6)	552 (4.6)	4,326 (35.7)	7,470 (61.6)	3,312 (27.3)
I	943 (7.8)	141 (1.2)	419 (3.4)	1,688 (13.4)	498 (4.1)
No Specified Multiple Use Class	277 (2.3)	274 (2.2)	296 (2.4)	304 (2.5)	303 (2.5)
Total	12,131 (100)	12,131 (100)	12,131 (100)	12,131 (100)	12,131 (100)

Table II-D-2

Comparison Of Major Plan Actions

Plan Action	Unit of Measure	No Action Alternative	Protection Alternative	Balanced Alternative	Use Alternative	Proposed Plan
CULTURAL RESOURCES AND NATIVE AMERICAN VALUES						
Cultural Resource Areas (Prehistoric/Historic)						
-High Value	Number Total Acres (000)[a]	NA	318 1,831	318 1,831	318 1,831	318 1,831
-Very High Value	Number Total Acres (000)[a]	NA	180 1,416	180 1,416	180 1,416	180 1,416
Protection provided known cultural resources (areas above) under Plan multiple-use classes						
-High to Moderate Protection -Limited Protection	Percent of Identified Area	NA NA	97 3	56 44	24 76	66 34
Archeological ACECs[c]	Number Total Acres (000)[b]	0 0	29 137	29 137	29 137	47 164
Native American ACECs[c]	Number Total Acres (000)[b]	0 0	8 80	8 80	8 80	8 80

a) May include private or State Lands.

b) BLM administered lands.

c) Many ACECs have multiple objectives and will be listed under more than one resource category.

Table II-D-2

Comparison Of Major Plan Actions

Plan Action	Unit of Measure	No Action Alternative	Protection Alternative	Balanced Alternative	Use Alternative	Proposed Plan
WILDLIFE						
Federally Listed Threatened and Endangered Species Critical Habitat						
Fish and Amphibians						
-In protection-oriented classes or present management	Acres (000)[a]	<0.1	<0.2	<0.2	<0.1	<0.2
	Percent	50	100	100	50	100
-In use-oriented classes or present management	Acres (000)[a]	<0.1	0	0	<0.1	0
	Percent	50	0	0	50	0
State-listed Rare Species Habitat						
Fish and Amphibians						
-In protection-oriented classes or present management	Acres (000)[a]	22	26	26	19	30 (26)[b]
	Percent	88	100	100	76	100 (100)
-In use-oriented classes or present management	Acres (000)[a]	3	0	0	6	0 (0)
	Percent	12	0	0	24	0 (0)
Peninsular Bighorn Sheep						
-In protection-oriented classes or present management	Acres (000)[a]	192	160	144	144	160
	Percent	100	100	96	85	100
-In use-oriented classes or present management	Acres (000)[a]	0	0	6	26	0
	Percent	0	0	4	15	0
Other						
-In protection-oriented classes or present management	Acres (000)[a]	384	1,216	544	64	956 (874)[b]
	Percent	29	84	40	4	62 (60)
-In use-oriented classes or present management	Acres (000)[a]	960	240	832	1,408	586 (582)[b]
	Percent	71	16	60	96	38 (40)

BLM Sensitive Species[c]						
Desert Tortoise						
-In protection-oriented classes or present management	Acres (000)[a]	1,408	3,155	1,600	320	2,273
	Percent	42	93	47	9	67
-In use-oriented classes or present management	Acres (000)[a]	1,984	237	1,792	3,072	1,119
	Percent	58	7	53	91	33
Desert Bighorn Sheep[d]						
-In protection-oriented classes or present management	Acres (000)[a]	1,472	2,885	2,179	1,178	2,590
	Percent	50	98	74	40	88
-In use-oriented classes or present management	Acres (000)[a]	1,472	59	765	1,766	354
	Percent	50	2	26	60	12
Other Species						
-In protection-oriented classes or present management	Acres (000)[a]	2,288	4,048	3,080	1,232	3,276 (3,344)[b]
	Percent	52	92	70	28	76 (76)
-In use-oriented classes or present management	Acres (000)[a]	2,112	352	1,320	3,168	1,034 (1,056)[b]
	Percent	48	8	30	72	24 (24)

a) May include private or State lands.

b) During June 1980, California Fish and Game Commission added 6 desert species to the State endangered list and one desert species to the State rare list. The numbers in parenthesis reflect the species listed prior to June 1980 and can be compared against the Draft Plan alternatives.

c) There are currently 7 BLM sensitive species. Only the desert tortoise was identified as sensitive when the Draft Plan alternatives were developed. See Table WL-2 for listing of current BLM sensitive species.

d) Desert bighorn was a proposed BLM sensitive species when Draft Plan alternatives were developed.

Table II-D-2

Comparison Of Major Plan Actions

Plan Action	Unit of Measure	No Action Alternative	Protection Alternative	Balanced Alternative	Use Alternative	Proposed Plan
Federally Listed Threatened and Endangered Species						
Managed by HMP[c]	Number	2	2	2	2	1
	Acres (000)[a]	<0.1	<0.1	<0.1	<0.1	<0.1
Managed by ACEC/HMP[d]	Number	0	0	0	0	1
	Acres (000)[a]	0	0	0	0	<0.1
State-listed Rare Species						
Managed by HMP[c]	Number	1	2	1	1	10[e]
	Acres (000)[a]	196	254	196	196	614
Managed by ACEC	Number	1	1	1	1	10[e]
	Acres (000)[a]	<0.1	<0.1	<0.1	<0.1	1.7
Managed by ACEC/HMP[d]	Number	0	0	0	0	2[e]
	Acres (000)[a]	0	0	0	0	24
BLM Sensitive Species						
Managed by HMP[c]	Number	1	5	4	0	19[e]
	Acres (000)[a]	25	2,074	966	0	2,307
Managed by ACEC	Number	1	1	1	1	5[e]
	Acres (000)[a]	25	25	25	25	150
Managed by ACEC/HMP[d]	Number	0	0	0	0	5[e]
	Acres (000)[a]	0	0	0	0	311
Other Species						
Managed by HMP[c]	Number	2	33	30	16	16
	Acres (000)[a]	200	2,792	2,071	652	1,525
Managed by ACEC	Number	0	36	36	36	6
	Acres (000)[a]	0	453	453	453	12
Managed under Wilderness Management Plan	Number	0	37	16	7	0
	Acres (000)[a]	0	1,413	812	482	0
Managed by ACEC/HMP[d]	Number	0	0	0	0	5
	Acres (000)[a]	0	0	0	0	279

VEGETATION						
Threatened and Endangered Plants						
In protection-oriented classes or present management	Percent[f]	42	87	76	36	72[e]
In use-oriented classes or present management	Percent[f]	58	13	24	64	28[e]
Vegetation ACECs	Number Acres (000)[b]	0 0	12 121	12 121	12 121	9 54
WILDERNESS						
Wilderness Suitable Areas Recommended for Designation	Number Total Acres (000)[b]	0 0	108 5,220	39 1,828	6 602	43 2,070
Portions of BLM-administered CDCA Recommended for Wilderness Designation	Percent[b]	0	43	15	5	17
Portion of CDCA Recommended for Wilderness Designation	Percent of CDCA	0	20	7	2	8

a) May include private or State lands.

b) BLM administered lands.

c) Habitat Management Plan.

d) These areas have an ACEC plan initially developed, followed by a Habitat Management Plan that may include a larger area.

e) These numbers based on current State lists of rare, threatened and endangered plants and wildlife and the BLM sensitive wildlife list. Draft Plan alternatives were developed using the old listings which were different.

f) Percentage of verified localities of 91 rare, threatened and endangered plants falling within protection or use-oriented management classes.

Table II-D-2

Comparison Of Major Plan Actions

Plan Action	Unit of Measure	No Action Alternative	Protection Alternative	Balanced Alternative	Use Alternative	Proposed Plan
WILD HORSE AND BURRO MANAGEMENT						
Herd Management Areas						
Wild Horses	Number	7	6	6	6	6[c]
Wild Burros	Number	31	26	26	26	14[c]
Wild Horse Forage Allocation	AUMs[b]	8,900	4,300	4,000	3,700	3,372
Wild Burro Forage Allocation	AUMs[b]	105,500	46,000	43,200	39,800	23,075
Total Wild Horses	Number	750	360	330	310	281
Total Wild Burros	Number	8,800	3,800	3,600	3,300	2,747
LIVESTOCK GRAZING						
Perennial Range						
Allotments	Number	35	10	10	10	13
Area Grazed	Acres (000)[a]	2,994	361	361	361	745
Ephemeral/Perennial Range						
Allotments	Number	0	28	29	29	27
Area Grazed	Acres (000)[a]	0	2,730	2,748	2,748	2,328
Ephemeral Range						
Allotments	Number	19	23	28	28	29
Area Grazed	Acres (000)[a]	1,189	1,551	1,771	1,771	1,975

Estimated Perennial Vegetation Carrying Capacity						
Existing Allotments	AUMs[b]	94,400	94,400	94,400	94,400	120,500
New Proposed Allotments	AUMs	1,500	1,500	1,500	1,500	6,300
Total	AUMs	95,900	95,900	95,900	95,900	126,800
Total Livestock Perennial Grazing Authorization						
Existing Allotments	AUMs[b]	102,100	74,700	78,000	81,900	74,700
New Proposed Allotments	AUMs	-	900	1,200	1,200	6,200
Total	AUMs	102,100	75,600	79,200	83,100	80,900
Total Perennial Vegetation Allocation to Wildlife (Bighorn Sheep and Mule Deer)						
Existing Allotments	AUMs[b]	4,500	5,600	5,600	5,000	1,570[e]
New Proposed Allotments	AUMs	-	-	-	-	-
Total	AUMs	4,500	5,600	5,600	5,000	1,570[e]
Total Perennial Vegetation Allocation to Wild Horses and Burros within Grazing Allotments						
Existing Allotments	AUMs[b]	59,100	13,750	10,850	7,150	9,500
New Proposed Allotments	AUMs	9,800	50	50	50	100
Total	AUMs	68,900	13,800	10,900	7,200	9,600
Ephemeral Vegetation Allocated to Livestock Grazing	AUMs[b]	Variable[d]	Variable[d]	Variable[d]	Variable[d]	Variable[d]

a) May include private or State lands.

b) Animal Unit Months.

c) Boundary changes in Herd Management areas have been made since the Draft Plan alternatives were developed.

d) Ephemeral livestock allocations to be determined annually after 200 pounds per acre annual production. In the past, such allocations have varied from 0 to 100,000 AUMs.

e) Allocation for bighorn sheep is only where grazing allotments overlap seasonal ranges.

Table II-D-2

Comparison Of Major Plan Actions

Plan Action	Unit of Measure	No Action Alternative	Protection Alternative	Balanced Alternative	Use Alternative	Proposed Plan
RECREATION						
Recreational Vehicle Use						
-Open Vehicle Play	Number	14	6	13	20	14
-Open Sand Dunes	Number	2	2	3	4	2
-Open Dry Lakes						
Motorized	Number	4	3	9	15	7
Nonmotorized (only)	Number	1	4	2	0	2
MOTORIZED VEHICLE ACCESS						
Open to Motorized Vehicle Use	Percent Acres (000)[b]	5.2 628	.8 93	2.4 289	10.8 1,306	4.0 485
Limited Motorized Vehicle Use						
Existing Routes of Travel	Percent Acres (000)[b]	61.8 7,496	5.0 600	36.7 4,457	64.7 7,852	26.7 3,239
Approved Routes of Travel	Percent Acres (000)[b]	28.0 3,402	48.4 5,880	42.7 5,175	16.4 1,991	48.2 5,847
Closed to Motorized Vehicle Use	Percent Acres (000)[b]	5.0 605	43.6 5,284	15.8 1,914	5.6 679	18.6 2,257
Unclassified Public Lands[b]	Percent Areas (000)[b]	0 0	2.2 274	2.4 296	2.5 303	2.5 303

MINERAL EXPLORATION AND DEVELOPMENT						
Locatable Mineral Potential						
-Moderate Controls on Exploration and Development	Acres (000)[a] Percent[c]	2,895[d] 60	436[d] 8	1,856[d] 38	3,731[d] 79	1,679[c] 30
-Stringent Restrictions on Exploration and Development	Acres (000)[a] Percent[c]	1,901 40	4,560 92	3,050 62	993 21	4,002 70
Leasable Mineral Potential						
-Moderate Controls on Exploration and Development	Acres (000)[a] Percent[c]	3,416[d] 70	518[d] 10	2,443[d] 51	4,106[d] 86	3,125[e] 49
-Stringent Restrictions on Exploration and Development	Acres (000)[a] Percent[c]	1,482 30	4,511 90	2,321 49	635 14	3,303 51
Saleable Material Extraction Areas						
-Subject to Moderate Controls	Acres (000)[a] Percent[c]	303[d] 61	26[d] 5	205[d] 42	460[d] 91	1,035[e] 49
-Subject to Stringent Restrictions	Acres (000)[a] Percent[c]	192 39	465 95	292 58	41 9	1,077 51

U.S. GEOLOGICAL SURVEY
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a) May include private or State lands.

b) BLM administered lands.

c) Percent of identified potential within multiple use class designation.

d) Based on preliminary data used in developing Draft Plan alternatives.

e) Based on analyzed data for approximately 28 percent of the CDCA and preliminary data for remainder of area.

Table II-D-2

Comparison Of Major Plan Actions

Plan Action	Unit of Measure	No Action Alternative	Protection Alternative	Balanced Alternative	Use Alternative	Proposed Plan
ENERGY PRODUCTION AND UTILITY CORRIDORS						
Planning Corridors						
-Energy Transmission and Utilities	Number	Not Limited	15	20	28	16
Approved Power Plan Sites Available	Number	13	6	6	13	2
Microwave Communication Sites Available	Number	6	5	5	6	5

E. Summary of Major Impacts

BY ALTERNATIVE

This section briefly summarizes the major impacts of each alternative. It is intended to give the reader an overview of the major differences between alternatives. To better understand the specific impacts on each resource from each Plan alternative, the reader is referred to the rest of this section, to the Draft EIS, and to the Environmental Consequences section of this Final EIS.

This comparison of alternatives is introduced by a description of some factors common to all alternatives.

The first common factor is the existence of the 137 Wilderness Study Areas (WSAs) covering 5.7 million acres, which were designated in accordance with the inventory process specified in Section 603 of FLPMA.

These areas must be managed so as not to impair their suitability for preservation as wilderness until Congress makes a final decision on designation. The rules for their management are detailed in the "Interim Management Policy and Guidelines for Lands under Wilderness Review." (These are excerpted on the back of Map No. 1 in the pocket in the back cover of this document.)

For the short term, therefore, the level of protection provided by interim management would apply to all alternatives, even the No Action Alternative. For purposes of analysis, it is assumed that the interim restrictions on uses within WSAs will be removed by Congressional action within 2 years following Secretarial recommendations for wilderness designation in 1984. Those recommendations are assumed to be the Class C areas in each alternative. No suitable wilderness recommendations are assumed in the No Action alternative.

Another factor which would affect all alternatives is the implementation of 3809 regulations for mining on public lands. These regulations, which would apply to all Bureau-administered lands, are scheduled for final adoption in the fall of 1980. Since FLPMA requires the Secretary of the Interior to regulate mining on public lands in the CDCA, it is assumed these regulations will be implemented for all alternatives, including No Action.

Similarly, the implementation of Federal, State, and local laws, regulations, ordinances and policies must be assumed to occur under all alternatives.

The principal difference between the impacts of alternatives, therefore, is expressed in terms of the relative acreage of public lands in the more protection-oriented Multiple-Use Classes C and L and those in the more consumptive use-oriented Multiple-Use Classes M and I. In the former classes there is a lower risk of impacting sensitive resources; in the latter, a lower risk of constraining consumptive use. Variations on this measurement of potential impact are used throughout the Environmental Consequences section of the Final EIS; a summary of each alternative's potential impact is presented below:

No Action Alternative

This alternative provides a useful comparison with other alternatives and is required in environmental impact statements by the National Environmental Policy Act.

Continuation of present BLM management without benefit of a desertwide management plan and implementation stratgy would result in widespread adverse impacts to most resources and resource uses.

Exception to this would be mineral exploration and development and motorized vehicle access since the No Action Alternative is least restrictive, although in these cases it is assumed that mining regulations and interim critical vehicle management regulations would apply.

The No Action Alternative would adversely impact 118 unique plant assemblages and up to 263 rare, threatened or endangered plant localities. Parts or all of the habitat within the CDCA of 8 of 13 listed species (Black Toad, Aleutian Canada goose, bald eagle, brown pelican, Yuma clapper rail, California black rail, California yellow-billed cuckoo, and Mohave ground squirrel) would be negatively affected under this alternative. Substantial portions of desert tortoise crucial habitat would also be adversely impacted, as would habitat for seven species being considered for sensitive status by BLM. Of the 70 special wildlife areas in the CDCA, 8.6 percent would be severely impacted, and the additional 32.8 percent would receive negative impacts. The remaining 58.6 percent would receive a balance of both low positive and low negative impacts. An estimated 112 of the 188 cultural resource areas of very high sensitivity and 158 of 237 cultural resource areas of high sensitivity would be adversely impacted and, in many cases, destroyed. Although the greatest direct impact would occur to surface sites, as much as 40 percent of the area having good potential for buried sites could be impacted. The reactive nature of the No Action Alternative results in high potential risk to cultural resources and Native American values.

All potential wilderness areas would be vulnerable to loss of wilderness values.

Mining and livestock grazing activities would be unchanged.

Protection Alternative

This alternative would have an overall beneficial impact on wildlife, vegetation, cultural resources, Native American values, soil, air, water, and wilderness. The alternative places 92 percent of the public lands in the CDCA in Classes C or L and recommends more than 5 million acres of public lands as suitable for wilderness designation. Severe negative impacts would be imposed on mining, off-road vehicle use and access, grazing, and utilities by reducing these activities to very low levels.

As originally proposed, The Protection Alternative could potentially impact 67 unique plant assemblages (46 percent less than No Action) and 154 rare, threatened or endangered plant localities (43 percent less than No Action). Seven officially listed species could have all or portions of their habitats affected deleteriously. Substantial portions of desert tortoise habitat in densities of 20 to 100 per square mile would be negatively affected, as would habitat for twelve species being considered for sensitive status (e.g., desert bighorn, golden eagle,). Desert bighorn populations would continue at current trends, with some herds continuing to decline and others remaining stable. After public review of the Draft Plan Alternatives, this alternative was revised in preparing the Proposed Plan and these impacts were ameliorated.

Of 70 special habitat areas, 37.1 percent would receive negative impacts, 1.4 percent would receive severe negative impacts, 34.3 percent would sustain no substantial positive or negative impacts, and 27.1 percent would receive positive impacts.

About 96 percent of known and predicted historic resources and approximately 95 percent of known and predicted prehistoric resources, fall within Classes C and L. This alternative provides the most favorable context for the preservation, protection, restoration, and stabilization of cultural resources.

The Protection Alternative would adversely impact livestock operations through a 23 percent reduction in grazing, seasonal use restrictions on 843,000 acres, and forage competition from burros and wild horses. Cattle use on perennial rangelands would be about 75,000 AUMs, a loss of 27,000 AUMs, resulting in an estimated 3,500 head reduction. Increased weight gains and higher calf crops would result, although these gains would not be sufficient to completely offset the loss of production from AUM reductions. Additional range improvements would distribute livestock more evenly and allow more uniform use of the rangeland. Weather patterns would continue to be the dominant force in controlling forage production and animal performance. Restrictions on grazing use on ephemeral ranges is expected to reduce grazing use by 20 percent more under this alternative. Restricting the grazing season and forage utilization would significantly reduce the forage available for fattening lambs. The actual levels of authorized use are determined annually, based upon forage production on ephemeral rangelands. Using past use as a measure, up to 20,000 AUMs would be lost during "average" years.

Visitor-use days by ORV users would decrease by .5 million and potential energy mineral areas would have energy development constraints on 92 percent of the area.

Balanced Alternative

This alternative produces both beneficial and adverse impacts. Beneficially, wildlife, vegetation, cultural resources, Native American values, soil, air, and water would be generally protected. Adversely, localized impacts would occur to some sensitive resources. Motorized vehicle "open" areas and some grazing allotments, in particular, could pose negative impacts on wildlife, vegetation, cultural resources, and Native American values. In addition, the restrictions which this alternative places on mining could adversely affect opportunities for mineral exploration and development.

The Balanced Alternative could impact 82 unique plant assemblages and 188 rare, threatened, or endangered plant localities. Eight officially listed wildlife species would receive impacts to their habitats. The desert tortoise would receive severe negative impacts to high sensitivity habitat, with extirpation predicted in three of four major crucial habitat areas. Species being considered for sensitive status by BLM would be substantially affected. Examples include the Amargosa River pupfish, Nevada speckled dace, flat-tailed horned lizard, Amargosa vole, and desert bighorn.

Of 70 special wildlife habitat areas, 71.4 percent would receive either negative or severe negative impacts under the Balanced Alternative. This alternative and the Use Alternative would affect habitat in the Desert's lowlands and valleys more than in the uplands and mountainous regions. Species such as the desert tortoise and flat-tailed horned lizard are highly negatively impacted. Movement corridors for desert bighorn sheep also receive potential negative impacts under this alternative from utility corridors, mineral exploration, and extraction or intensive motorized vehicle use.

Approximately 58 percent of known historic and 57 percent of known and predicted prehistoric material cultural resources would receive protection under Class C and L multiple use class guidelines. Forty-two and 43 percent of known and predicted cultural resources, respectively, are within Class M and I, where there is a higher potential for negative impacts. Resources located in and along the playas and sinks occurring in Classes M and I will be lost through permissable activities (e.g., motorized vehicle free play, grazing, mining). About 79 percent of identified areas of Native American traditional value occur within Classes C and L. Although specific impacts and resource concerns vary among the groups contacted, highly sensitive areas fall within Classes C and L in the majority of cases.

The Balanced Alternative would provide protection of wilderness values for 31 percent of the potential wilderness areas. Vehicle free play opportunities would be reduced from 628 to 419 thousand acres. Grazing use would be reduced 19 percent and restrictions on season of use are imposed on 530,000 acres. Fifty percent of potentially valuable energy mineral areas would have constraints on development.

Use Alternative

This alternative creates a high level of potential negative impacts to sensitive resources such as wildlife, vegetation, cultural resources, Native American values, soil, air, water, and wilderness because of its emphasis on consumptive uses for grazing, mining, utilities, and motorized vehicle recreation.

Up to 118 unique plant assemblages and 263 rare, threatened or endangered plant localities could be impacted.

Nine of 13 officially listed species would receive negative or severe negative impacts to their habitats and populations. The desert tortoise would lose 97 percent of its habitat desertwide. The Desert Tortoise Natural Area would be the only sanctuary for this species and would probably not be viable because of its small size. Species being considered for sensitive status by BLM would be severely affected, with extirpations to many populations. Twenty-five percent of desert bighorn herds would be extirpated, and most remaining herds would decline severely. Twenty-three significant species would also be adversely affected. Special habitat areas would, for the most part, be lost. About 90 percent would be negatively or severely negatively affected. Only 5.7 percent of the CDCA would receive no substantial impacts; 4.3 percent would have positive impacts.

Approximately 74 percent of the historic material resources and 76 percent of the prehistoric resources (both known and predicted) would be exposed to impacts and possible distribution within Classes M and I. Sixty-one percent of identified Native American sensitivity areas would also be exposed to destruction and desecration by allowable activities.

The Use Alternative provides the least protection of wilderness values, with 6 of 137 Wilderness Study Areas proposed for wilderness designation.

Livestock grazing has the smallest reduction (13 percent) and the least season of use and forage use restrictions in this alternative. Vehicle-oriented recreational use is also least restricted, with 1,306,000 acres available for free play by ORVs.

Constraints on energy and mineral development pertain to only 14 percent of the CDCA.

Proposed Plan

The Proposed Plan responds to public issues and tends to balance demands for resource protection and use, resulting in beneficial impacts to most resources because 66 percent of the public lands have Class C or L designations. Some adverse impacts would result from general mining activities, 496,000 acres of off-road vehicle "open" areas, and some grazing allotments.

The Proposed Plan could impact 67 to 82 unique plant assemblages and 154 to 188 rare, threatened or endangered plant localities. The impacts to listed species would not be significant, but has not been totally eliminated. The greatest risk occurs in the Stoddard Valley "open" area where four listed species would be monitored. The addition of nine ACECs to the Proposed Plan to provide protection for listed species would significantly benefit those species as well as several unique plant assemblages.

Removal of burros from Big Sand Spring would benefically impact a species which is a candidate for endangered species designation. Another candidate species occurs in a remaining horse concentration area but impacts are unknown and would be monitored.

Potential beneficial impacts could accrue to the desert slender salamander due to proposed land acquisition. The Mojave chub population and habitat would continue to improve under a Habitat Management Plan and ACEC designation. The remaining five of seven federally listed wildlife species would receive no adverse impacts.

Ten State-listed rare and endangered species would receive protection and habitat improvement through ACECs, HMPs, and class designations. None of these species would be negatively impacted.

All seven BLM sensitive species would not be adversely impacted. Five species would be beneficially impacted. Habitat conditions on 70 percent of special habitat areas would receive either no significant impacts or beneficial impacts.

About 74 percent of highly sensitive and 78 percent of very highly sensitive cultural resources receive the protection of Classes C and L, thereby significantly reducing the risk of adverse impacts. An estimated 85 percent of identified areas of Native American traditional values occur in Class C and L, which will reduce potential for disturbance or desecration of these values.

Wilderness values would be protected for 37 percent of all potential wilderness areas through suitable recommendations.

Motorized vehicle free play use areas would be reduced by 20 percent.

Mineral exploration and development would be affected by Classes C and L constraints on 66 percent of public land.

Grazing uses would be reduced 25 percent and grazing constraints to accommodate other resource needs would require livestock operators to modify current management. Water developments and fencing would partially offset these adverse impacts to the operators. Improved range conditions and potential allocation of 6,200 AUMs in previously grazed, but currently unallocated ranges would further reduce the impacts of reductions in grazing use on current allotments.

F. Cost Analysis of Major Actions

COST ANALYSIS

Relative cost differences between alternatives are difficult to display in summary form. There are several cost variables that can serve to describe the relative emphasis of cost within alternatives. These variables are defined below:

Land Acquisition (Land Tenure Adjustment). This includes costs associated primarily with acquiring land through Land Exchanges.

Enforcement and Education. This includes costs associated with all actions relating to informing and educating the public(s) through brochures and pamphlets, patrols, operating visitor and contact stations.

Planning and Inventory. Includes costs associated with necessary land use planning, resource activity planning, and inventory to continue management of the CDCA public lands.

Personnel. Includes costs associated with the estimated size of staff to manage the Desert.

Monitoring and Compliance. Includes costs associated with establishing and operating a monitoring program, and conducting compliance on all activity within the CDCA public lands.

Mitigation. Includes costs associated with activities required to mitigate adverse environmental impacts as a result of various uses of public lands.

Revenues. Includes costs associated in activities associated with actions - where revenues are received, e.g., oil and gas receipts.

On-the-Ground Management and Site Specific Management Decision Analyses. Includes costs associated with site specific on-the-ground management such as implementing resource activity plans and preparing environmental analyses.

Land Acquisition (Land Tenure Analysis). Estimated costs would be the greatest in the Protection Alternative due to the large area in Multiple-Use Classes L and C. These classes emphasize blocking-up public ownership to protect and preserve sensitive resource values on private lands. Estimated costs would be lowest in the No Action Alternative because blocking up is not emphasized. The Proposed Plan emphasizes making land tenure adjustments to solve public issues, and the cost is more moderate.

Enforcement and Education. Again, estimated costs would be the greatest in the Protection Alternative because preserving and restricting greater portions of the Desert would be emphasized, requiring more enforcement. In the Proposed plan, management of the CDCA will be enhanced by an information education program at moderate cost. The lowest cost estimates would be for the No Action and Use Alternatives.

Planning and Inventory. Continuing planning and inventory will be necessary in all alternatives. The Protection and Use Alternatives would be the most costly because more information is needed to resolve conflicts. The costs in the Balanced Alternative and Proposed plan would be less, but in the Proposed Plan would be oriented toward issues.

Personnel. The Proposed Plan will require a more diversified staff: more different kinds of skills, and, probably, more people overall to deal with issues and potential conflicts. The Use Alternative would require a high number of people to respond to use applications and the Protection Alternative would require more people for enforcement. The No Action Alternative would be the most costly for personnel management.

Monitoring and Compliance. Estimated costs would be the greatest in the use Alternative because the more consumptive type of uses would have more actions to monitor. The Protection Alternative would have fewer use actions to monitor. Monitoring of the Proposed Plan would be more on the resources themselves. Therefore BLM could better control the costs.

Mitigation. Cost estimates would be highest in the Use Alternative and lowest in the Protection Alternative. The reason is simply that there would be more actions in the Use Alternative requiring mitigation measures and there would be fewer in the Protection Alternative. Mitigation cost in the Proposed Plan would be toward an optimization of use and protection.

Revenues. Revenues received would be greatest in the Use Alternative and least in the Protection Alternative, at least initially. The Proposed Plan would provide for more efficient management of revenue-producing resources and, in the long run, may result in more revenues which are distributed more evenly over local and regional economics.

In conclusion, a total cost for each alternative is not meaningful. It is more meaningful to assume that the cost for a Multiple-Use Plan will be about the same no matter whether the plan is for more protection or for more use. What is meaningful is to look at the emphasis of cost variables within any given fixed budget. In the long run, the Proposed Plan should provide the most efficient management of the CDCA public lands, and provide for the best mix of all uses for the least cost.

Affected Environment

IV

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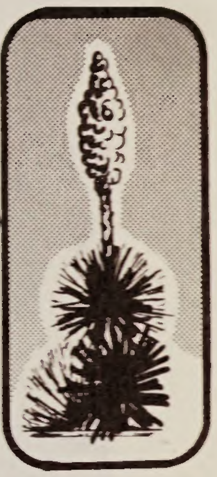
B. RESOURCES AND USES 39



IV. Affected Environment

A. Introduction

The essence of the California Desert has been described in the "Perspective" chapter at the beginning of this document. If you have not already read that chapter, you should go back before reading further because it is basic to an understanding of the affected environment on the Desert.

This chapter describes the specific resources and uses of the CDCA which would be impacted by the Proposed Plan or any alternative. Eighteen resources and uses have been identified. Some of those, such as wildlife, vegetation, and cultural resources, will be impacted by land use and development provided for in the Proposed Plan or alternatives. Others, such as utilities, motorized vehicle access, and land tenure adjustment will be impacted by constraints the proposed plan or the alternatives place on them to protect sensitive resources.

We have kept the Affected Environment section brief because the 18 resources and uses will also be discussed in the Environmental Consequences chapter where we will analyze the impacts on each. There is a wealth of additional information about the CDCA available in the appendices and in BLM files. If you are interested in finding out more about any particular topic discussed here, you should refer to the detailed appendix description in Section VII, B of this document. The resources and uses which will be discussed include:

Air quality
Water resources
Soil
Vegetation
Wildlife
Wild horses and burros
Cultural resources
Native American Values
Visual Resources
Wilderness
ACECs
Socioeconomic concerns
Recreation
Motorized vehicle access
Livestock grazing
Mineral exploration and development
Energy and Utilities
Land tenure adjustment

One of the most difficult concepts to express, in analyzing impacts on the Desert, is "who impacts what?" Multiple use implies an equal consideration of "apples and oranges," which makes comparisons awkward.

Cottonwood Creek

It is simplistic to think of basic resources -- soil, vegetation, wildlife -- being impacted by basic uses -- grazing or mining. Actually, the "impactee" -- endangered species, wilderness, and similar values -- often constrains legally the so-called "impactor" -- vehicles, utility corridors, and similar uses. It becomes even more complex when something is both a user and a resource, an impactee and an impactor, at the same time. The wild burro is probably the classic example.

Therefore, this EIS deals with a list of resources and uses of the CDCA and consistently incorporates all of these for analytical purposes. This list is a basket which admittedly contains apples and oranges, and perhaps a couple of pinyon nuts. The approach is designed so the necessary objective balance implicit in multiple use, sustained yield and the maintenance of environmental quality can be understood, sought for, and achieved.

GENERAL DESCRIPTION

The California Desert Conservation Area encompasses 25 million acres and covers one-fourth of the entire land surface of the State of California. It lies in the southeast quarter of California, skirting the Colorado River on the east and Mexico on the south. On the north and west are the peaks of the Sierra Nevada and, to the southwest across the coastal ranges, lies the metropolitan complex of southern California, from Santa Barbara, through Los Angeles, to San Diego. In the 1970 census, California's population was approximately 23 million people, the largest in the nation, and over 12 million of those people lived in the 12 southern California counties. In increasing numbers, these people have been using the Desert lands and resources for recreation and solace and as an escape from their day-to-day urban environments.

Half of the CDCA's 25 million acres -- 12.1 million acres -- are public lands, managed by the Bureau of Land Management in trust for the people of the United States. These public lands, the residual of a century and a quarter of land disposition, are the target of the California Desert Plan.

ECOSYSTEMS

The public lands in the CDCA probably have the widest array of ecosystems and environments within a single management unit in the U.S. outside of Alaska. With a length of 350 miles and width of 250 miles, and a spread of elevation on public lands of almost 11,500 feet, an almost infinite number of natural forms and processes exist.

The resources and uses of the CDCA will be described individually. However, we should keep in mind the fact that they are actually intertwined in a series of connecting systems and processes. We have chosen to use the term "ecosystems" to refer to the many interrelationships of the natural environment. On the one hand, the CDCA has many characteristics which distinguish it from woodland, grassland, and other major environments. It is typically desert -- a place where plants and animals have uniquely adapted to the harsh, dry environment. On the other hand, when we look more closely, we see a surprising range of differences within the Desert itself. Scientists have identified three major subdivisions of the CDCA: the Mojave, Great Basin, and Sonoran Deserts. Each can be defined in terms of its own distinct varieties of plants and animals. The Great Basin is noted for its sagebrush; the Mojave for its creosote brush, yucca and Joshua trees; and the Sonoran for its ironwood and paloverde.

We can divide the desert ecosystem into still smaller units to reflect various mini-environments. Riparian systems are scattered throughout the CDCA and contain a rich diversity of plants and animals. Higher elevations, which receive more rainfall and are generally cooler than the rest of the Desert, often support stands of pinyon, juniper, and other woodlands. Unique desert landforms such as sand dunes and dry lakes or playas are micro-environments which contain plants and animals found nowhere else. Some rare species of plants and insects, for example, live only on sand dunes in the CDCA.

Ecosystems in the CDCA result from the interaction of many factors -- elevation, soil, aspect or exposure, water, and wind. There are many different kinds of ecosystems. They often overlap or blend together at the edges, making it difficult to distinguish where one ends and another begins. We have discussed ecosystems because we think it helps put the impact analysis of each resource in perspective.

Compared to most deserts of the world, the California Desert is lush. Even the sand dunes of the Sonoran Desert, with less than 2 inches of annual precipitation, produce a variety of annual and perennial vegetation. Precipitation in the CDCA ranges by elevation and setting from perhaps less than one inch to probably over 14 inches. Most of the public lands probably receive amounts in the 2-to-6-inch range. These rainfall amounts, though, deceive the uninitiated. Frequently there may be gaps of a year or more between rainfall events, particularly at the lowest elevations.

The Final Environmental Impact Statement and Proposed Plan speak to managing this environment: varied and variable, extreme to the unprotected, composed of species adapted to it and relics of other geologic ages, and still evolving, yet considered climax by human ecological measures. The document also considers the interaction between man and the environment. Were man not present as a resident or visitor, there would be no need for a Plan.

The environment of the CDCA also includes the institutional setting, especially the evolved patterns of land ownership. The original public lands provided a land base for settlement, for military withdrawal, for National Parks and Monuments, for growth of the nation's transportation, and for the support of education in the State of California. The public lands have evolved from a perception as being "leftover wasteland" to public recognition that they are a national treasure for both resource values and public use. Current ownership and administration patterns in the CDCA show that, in addition to the almost 50 percent for which BLM is responsible, 23.7 percent is in private hands, 12.4 percent is used by the military, and 9.7 percent is in National Monuments. The Plan presented herein speaks to the maintenance of this land -- specifically those public lands managed by BLM -- as land for use, enjoyment, and development on behalf of all the people of the United States.

B. Resources and Uses

AIR QUALITY

In general, air quality within the CDCA is very good to excellent, ranging from an annual mean visual range of 25 miles along the western boundary to 70 miles along the eastern boundary of the CDCA. In some portions of the Death Valley area, the visual range is 90 miles.

Visibility is probably the most important air quality factor within the Desert region and is the most easily impaired by activities which generate dust (especially fine particulates) and sulfur dioxide. Impact visibility from pollutants transported from the major urban centers is likely and, when present, is probably in the form of widespread regional haze. The urban plume from the Los Angeles Basin also frequently impairs visibility in the Joshua Tree National Monument region of the CDCA.

Local pollution sources in the Desert consist primarily of particulate matter from off-road vehicles, windblown soil, mining operations, and agricultural activities. These sources occasionally cause violations of the particulate standards at many locations.

Most air pollution is transported into the Desert by prevailing winds from the Los Angeles Basin.

WATER RESOURCES

Surface Water

Surface water sources such as springs, seeps, and streams, are rare within the CDCA. The small quantity has severely limited development except for small scale domestic use, agriculture, livestock, and wildlife watering.

Ground Water

About 100 areas of known or potential ground water storage, comprising over 16 million acres, have been identified in the CDCA. Ground water varies from one basin to another and development has been primarily for agricultural and domestic use. Some basins have virtually no development, while problems of overdraft have occurred in Antelope Valley, Lucerne Valley, Coachella Valley, and the upper, middle, and lower Mojave Valleys.

SOILS

The CDCA contains a variety of different and extensive landform types which were used to group the various soils within the CDCA. Many areas also have very complex patterns of landform types. Intricate patterns of washes, alluvial fans and dissected alluvial fans are found along mountain fronts and complex sand dune forms are found within the many sand dune fields. The majority of desert soils remain free from disturbance by human activity (Map No. 3 at the end of the Affected Environment section displays soil sensitivity ratings throughout the CDCA.)

VEGETATION

Although plant cover is sparse, vegetation is profoundly important to the functioning of desert ecosystems. Botanists view this environmental factor from two perspectives. The floristic perspective places emphasis on the kinds of plants (species) found in the desert and their distribution. The vegetation perspective places more attention upon certain species in terms of abundance, cover and production and to the combination in which these species occur.

Flora

Seven floristic subdivisions, or zones, have been identified in the CDCA, in which the diversity and type of plants differ according to a variety of physiographic and climatic factors. The approximate boundaries of these zones are shown on Map No. 5, at the end of the Affected Environment section.

The floristic perspective also encompasses the identification of rare, threatened, and endangered species, and unique plant assemblages. A total of 91 species of vascular plant have been identified as rare, threatened, and endangered in the CDCA and an additional 54 are considered candidates for listing by the U.S. Fish and Wildlife Survey (see the Wildlife Element in the Proposed Plan and Appendix X for further information).

Unusual plant assemblages (UPAs) are those which can be recognised as being extraordinary, either because of unusual size of individuals, exclusivity within the CDCA, or because of special biogeographic factors. Those UPAs which have been identified in the CDCA are shown on Map No. 10 in the Wildlife Element of the Proposed Plan.

General Vegetation

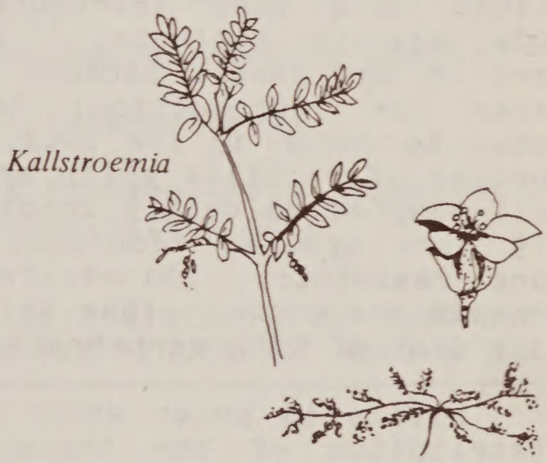
Only a few hundred of the approximately 2,000 species of plants in the California Desert contribute significantly to the vegetational aspect. Vegetation of the CDCA is comprised of small trees, shrubs, succulents, and herbs. Herbs are represented by perennial and annual types. These growth forms may occur almost exclusive of one another or, more commonly, are intermingled to make complex vegetation patterns (see map of generalized vegetation at the end of this section).

Desert scrub and shrubland occupies approximately 80 percent of the CDCA. The bulk of the plant biomass is made up of shrubs. Shrub ground cover ranges from less than one percent to over forty percent. Stands of creosote bush and its common shrub associate burro bush are the most significant contributors and dominate much of the desert landscape. These two species exhibit a broad ecological amplitude that enables them to occupy vast areas of the hotter and dryer portions of both the Colorado and Mojave Deserts below 4,000 feet. They do not occupy more than a few percent of the CDCA.

Small tree woodlands fall into two categories: conifer stands (mostly juniper and pinyon) above 5,180 feet in the desert mountains, and stands of deciduous trees (mostly paloverde, ironwood, and desert willow) of the low elevation washes. Together they occupy approximately 10 percent of the CDCA, the former being distributed mostly in the Mojave and the latter in the Colorado Desert. Although the area occupied by these woodlands is small when compared with the shrublands, their productivity is high and contributes significantly to the total biological activity of the desert region. Vegetation containing Joshua trees (Yucca brevifolia) may also be designated as woodland, but since this species usually grows well dispersed in a variety of shrub and grassland communities at mid-elevations throughout the Mojave, such a unit is not easily defined. In addition to having tree stature, Joshua trees also have a structure and metabolism similar to that of cacti and other succulents.

Succulents have a distinctive type of metabolism that is significant in understanding desert vegetation. They are sometimes considered specialized types of shrubs generally having about the same stature. However, they exhibit distribution patterns related to their unique physiology that sets them apart. All the members of the cactus and agave plant families (Cactaceae and some Agavaceae), particularly Agave, belong in this category. Members of these families dominate the vegetational composition in parts of the Colorado Desert at elevations between 3,000 and 4,000 feet.

Vegetation in which herbs may predominate in the desert are of two types, perennial grasslands and stands of annual forbs and grasses. Perennial grasslands occur in the east Mojave at elevations between 4,000 and 5,500 feet. They also occur at lower elevations on sand sheets covering slopes and valleys. Perennial grasses are especialy prominent following years of high rainfall. The principal perennial grass species throughout most of the Desert is big galleta grass. Grasslands occupy less than 5 percent of the CDCA.



Stands of annual forbs and grasses occur extensively throughout the CDCA in a remarkable on-again, off-again sequence related to frequency and intensity of precipitation. High, evenly spaced rainfall during the fall and winter commonly results in spectacular wildflower displays the following spring. Intense summer storms bring on the rapid development of an entirely different set of annual species that complete their entire life cycle in a matter of weeks. The development of both spring and summer displays fail completely in the absence of rain. Spring displays are more frequent in the southwestern Mojave. Summer displays are more characteristic of the eastern Mojave and upper Colorado portions of the CDCA. The species of winter annuals number into the hundreds, but there are just over a dozen summer annuals. This component of the vetatation is of great importance to livestock.

WILDLIFE

The California Desert Conservation Area (CDCA) is a large and diverse region containing parts of three major deserts and a complex combination of soil, topographic, vegetation, and climatic types. This intermingling across the length and breadth of the CDCA has produced a number of major ecosystems, resulting in the wildlife habitats and fish and wildlife species occurrences in the CDCA which are discussed briefly here. (Major CDCA fish and wildlife ecosystems, as well as transition zones, or ecotones, are shown on Map No. 4 at the end of this section.)

Within the large, topographically defined ecosystem and ecotone boundaries, there are over 100 different kinds of wildlife habitats in the CDCA, ranging from those typical of low elevations to those found in alpine situations. Some of the more common are saltbush and creosote bush scrub, Joshua tree and Mojave yucca communities, sagebrush, blackbrush, and pinyon-juniper woodlands.

At least 635 species of vertebrate animals have been recorded in the CDCA. Six species of fish are native to the CDCA, two fish species native to the Colorado River have invaded the CDCA through irrigation canals and 34 other fishes have been introduced to various CDCA aquatic habitats. Amphibians are rare in the desert because they depend on water for reproduction; 16 species are known to occur in the CDCA. There are 64 species of reptiles which are, in general, well-adapted to desert conditions. Of the 419 bird species recorded, 98 are year-long residents. Ninety-four species of mammals are known. (See Appendix IX for a full list of CDCA vertebrate species.)

Little is known about the species or distribution of the thousands of desert invertebrates, which are critical to the functioning of desert ecosystems.

Since the 1800s, wildlife resources in the CDCA have gradually deteriorated. Several species have been extirpated, and populations of others have become seriously reduced.

Currently there are five species listed as endangered on both Federal and State lists: Mohave Chub, desert slender salamander, peregrine falcon, bald eagle, and brown pelican. The Aleutian Canada goose and Yuma clapper rail are only on the Federal endangered list. The Mohave chub and desert slender salamander are found only in the California Desert. Of important note is the almost exclusive occurrence of four federally listed species -- brown pelican, Aleutian Canada goose, bald eagle, and peregrine falcon -- at the Salton Sea. The Salton Sea lies in unclassified lands within the CDCA.

An additional 15 species are officially listed by the State. Six are endangered: desert pupfish; Coachella Valley fringe-toed lizard, elf owl, least Bell's vireo, Inyo brown towhee, and Amargosa vole. Four of the six are found only in the CDCA. Nine species are officially listed as rare: Tehachapi slender salamander, black toad, Yuma clapper rail, California yellow-billed cuckoo, California black rail, magic gecko, Mohave ground squirrel, California bighorn sheep, and Peninsular bighorn sheep. Two of these species, the black toad and Mohave ground squirrel, are found only in the CDCA. The Tehachapi slender salamander has not been found within the boundaries of the CDCA, but it occurs very near the edge. Potential habitat is present within the CDCA.

Sensitive species include animals undergoing an official status review or being proposed for listing pursuant to the Endangered Species Act, animals with rapidly declining populations, and animals with such limited habitat or population size that they are unable to withstand significant losses in numbers, habitat, or habitat condition.

Currently there are seven official BLM sensitive species, the desert tortoise, Nevada speckled dace, Amargosa pupfish, Inyo slender salamander, San Sebastian leopard frog, flat-tailed horned lizard, and desert bighorn sheep. Several other species are under consideration for sensitive status and require special attention. They are: Shoshone cave whip-scorpion, Andrews' dune scarab beetle, western pond turtle, golden eagle, osprey, vermillion flycatcher, summer tanager, Kingston Mountain chipmunk, Coachella round-tailed ground squirrel, yellow-eared pocket mouse, and Panamint kangaroo rat. Four of these are either proposed for Federal threatened or endangered listing or under status review: Shoshone cave whip-scorpion, Andrews' dune scarab beetle, desert tortoise, and flat-tailed horned lizard. (See Wildlife Element in the Proposed Plan and Appendix IX.)

WILD HORSES AND BURROS

Under the protection of Federal law, populations of burros in the CDCA are increasing at between 10 and 20 percent per year. Burros have nearly doubled their numbers since 1976. Wild horses are following a similar pattern, but are less abundant. An estimated 10,200 burros and 960 horses presently live in the CDCA. Twenty-two wild burro and horse management units are recognized. High concentrations of burros occur in the northern and eastern Mojave Desert and in the Colorado Desert adjacent to the Colorado River. They are extending their range into habitats not occupied formerly. Range expansions have been particularly large during the past three years due to exceptional forage production.

Populations in many of the herd management areas are so large they are severely overusing the vegetation, particularly around water. Bighorn sheep and mule deer, are being severely impacted. Burros and livestock are often in direct competition. Approximately one million acres of wild horse and burro range occur within areas that have been historically used for livestock grazing. The delicate ecological balance of the CDCA is seriously threatened by the high and increasing burro populations, as is the health of burro herds and individual animals.

CULTURAL / PALEONTOLOGICAL RESOURCES

To date, over 14,000 prehistoric-historic cultural resource sites have been officially recorded in the California Desert Conservation Area (CDCA). Based on a one to two percent systematic sampling of the area for archaeological remains, minimum projection estimates indicate that more than 100,000 sites of various sizes and complexities are present in the California Desert.

Human and natural causes have subjected these resources to continuing degradation, with estimates that over 35 percent of the prehistoric-historic sites in the CDCA have been seriously degraded. In the last decade alone, there has been an alarming increase in the number of sites damaged or destroyed.

Many properties in the CDCA are listed on, or considered eligible for nomination to, the National Register of Historic Places. These 66 properties are listed in Table IV-B-1.

Table IV-B-1

National Register of Historic Places in the CDCA

1. LISTED PROPERTIES

Imperial County

Yuma Crossing and Associated Sites
Fages-De Anza Trail-Southern Emigrant Road

Inyo County

Big and Little Petroglyph Canyons (Naval Weapons Center)
Leadfield (Death Valley)
Skidoo (Death Valley)
Eagle Borax Works (Death Valley)
Saline Valley Salt Tram Historic Structure
Harmony Borax Works (Death Valley)
Coso Hot Springs (Naval Weapons Center)
Death Valley Scotty Historic District (Death Valley)

Kern County

Bandit Rock (Robbers Roost)
Walker Pass
Last Chance Canyon

Los Angeles County

Little Rock Creek Dam (1 mile south of desert)

Riverside County

Blythe Intaglios
Andreas Canyon (Rincon Village)
Tahquitz Canyon
Martinez Historical District
Barker Dam (Joshua Tree)
Desert Queen Mine (Joshua Tree)
Ryan House and Lost Horse Well
Coachella Valley Fish Traps

San Bernardino County

Harvey House Railroad Depot (Casa Del Desierto)
Piute Pass Archaeological District
Crowder Canyon Archaeological District (borders desert)
Keys Desert Queen Ranch (McHaney Ranch) (Joshua Tree)
Wall Street Mill (Joshua Tree)
Whipple Cave
Calico Mountains Archaeological District
Topock Maze Archaeological Site

2. PROPERTIES DETERMINED TO BE ELIGIBLE, NOMINATED, OR IN THE PROCESS OF NOMINATION

Imperial County

Chocolate Mountains Archaeological District
Holtville Vicinity: Archaeological Sites 4-Imp-2936, 2937,2939
Holtville Vicinity: Archaeological Sites 4-Imp-318, 322, 324, 1747, 1748, 1749, 1750
Lake Cahuilla. Lot 1
Lake Cahuilla. Lot 5
Yuha Basin Archaeological District (in process)

Inyo County

The Twenty Mule Team Borax Wagon Road (also Kern and San Bernardino counties)
Fossil Falls (in process)

Kern County

Site Ca-Ker-322 (Edwards AFB)
Site Ca-Ker-505 (Edwards AFB)

Los Angeles County

None

Riverside County

Sundesert Archaeological District A
Sundesert Archaeological District E
Sundesert Archaeological District F
Archaeological District La Quinta Evacuation Channel (covers a 240-ft. easement from La Quinta to the White Water at Indio)
Cottonwood Oasis (Joshua Tree)
Lost Horse Mine (Joshua Tree)
Indio Hills
McCoy Springs (in process)

San Bernardino County

Steam Well Petroglyph Archaeological District
Trona Pinnacles Railroad Camp
Squaw Spring Well Archaeological District
Twentynine Palms Oasis (Joshua Tree)
Cow Cove Archaeological District (in process)
Aikens Wash Archaeological District (in process)
Rodman Mountains Archaeological District (in process)
Bedrock Springs Archaeological District (in process)
Old Wells Archaeological District (in process)
Golden Valley Archaeological District (in process)
CA-SBr-187 (Susugino) (in process)
Goldstone Mining District (in process)
Needles Vicinity District
Rock Cairn Complex
Vidal Junction (in process)
Lavic (in process)

Paleontological resources consist of the fossilized remains of past representatives or other evidence of flora and fauna. Fossilized fauna are usually further segregated into two classes: vertebrate and invertebrate. Fossils generally occur in sedimentary deposits with occasional exceptions when volcanic ash or flow material may entomb an animal or, more rarely, non-pyrolized plant remains. The probability of encountering paleontological remains hinges on many factors including the depositional environment, post depositional factors (e.g. tectonism, metamorphism, erosion, ph conditions) and, ultimately, exposure through faulting and dissection.

Major deposits within the CDCA that are known to contain paleontological resources reflect these factors. The known areas have been described in reports prepared for the California Desert Plan (Woodburne, 1979; Murphy, 1978; Axelrod 1979). Also mentioned are large areas of sedimentary strata that could possibly contain similar resources but have not been professionally examined or recorded.

With the exception of Quaternary lacustrine strata, the overwhelming majority of the known highly sensitive areas and predicted areas occur in areas of some relief (e.g., badlands, hills, and mountains) where dissection has exposed the remains. These areas as a whole are randomly dispersed throughout the entire CDCA.

NATIVE AMERICAN

Native American tribal groups have inhabited the California Desert Conservation Area for centuries and many continue to hold traditional religious and cultural values that are intertwined with this environment. Original village sites, collection areas, areas associated with creation, ritual, and ceremonial activity are significantly connected to specific desert resources and regions. The various potential impacts to the California Desert Conservation Area can be of concern to eighty-one different Native American tribal groups and sub-groups.

Those culturally and religiously significant areas which are identified in myth and oral narrative as particularly sacred can be highly sensitive to negative impact. Protection of these areas for centuries has depended on maintaining the secrecy of exact locations; in fact, these areas may be conspicuously lacking in archaeological remains which demonstrate prehistoric use of the land. Nevertheless, cremation and mortuary areas such as burial sites continue to be of serious importance and concern to all Native American groups. The Whipple Mountains, for example, contain springs, canyons, and trails of religious value to Native Americans.

VISUAL RESOURCE

The incredible scenery of the California Desert is familiar to many millions of Americans who have visited the area, read "Sunset" magazine, or seen any of the thousands of western films made in the Desert. Rugged mountain ranges, vast basins, bajadas and playas, crystal clear air, unique and dramatic plants and trees combine to form a visual resource of exceptional quality in the Desert.

WILDERNESS

Approximately 43 percent of the BLM-administered lands in the CDCA (5.7 million acres) meet the wilderness criteria identified in the Wilderness Act of 1964 and thus, have been designated as Wilderness Study Areas (see the Wilderness Appendix for individual site descriptions of the WSAs). Pursuant to the Federal Land Policy and Management Act of 1976, these areas are being studied as part of this California Desert Plan by BLM to recommend suitability for wilderness designation by Congress.

ACECs

Areas of Critical Environmental Concern (ACECs) are defined as those areas within the public lands where special management attention is required (when such areas are developed or used, or where no development is required) to protect and prevent irreparable damage to important historic, cultural, or scenic values, fish and wildlife resources, or other natural systems or processes, or to protect human life and provide safety from natural hazards (FLPMA Section 103, (a)). Designation of areas as ACECs will not preclude development but rather ensure the protection of sensitive values in these cases where appropriate development may take place. Seventy-three ACECs are included in the Proposed Plan.

RECREATION

There are a wide variety of recreational activities taking place in the CDCA.

Studies show most recreation occurs on weekends and holidays. Visitors spend an average of seven days in the Desert each year with most persons engaging in more than one recreation activity during their visit. Virtually all forms of recreation involve a vehicle, either for access to recreation opportunity locations on sites or simply for the pleasure of operating the vehicle as an end in itself.

Given the wide range of recreational activities in the California Desert, conflicts often occur between various recreational values. BLM lands play an important part in providing recreation opportunities and experiences in the CDCA. Approximately 16 million visitor-use days are spent in the CDCA each year.

MOTORIZED VEHICLE ACCESS

By conservative estimate, the California Desert Conservation Area includes about 15,000 milles of paved and maintained roads, 21,000 miles of unmaintained dirt roads, and 7,000 miles of washes large enough to accommodate vehicles. Using these figures, it has been determined that 50 percent of the California Desert Conservation Area is within one mile of a road or way, and 95 percent is within three miles of a road or way, making the CDCA one of the most accessible deserts of its size anywhere in the world.

LIVESTOCK GRAZING

Acreage and intensity of livestock grazing in the California Desert has continually declined during this century. Lands formerly grazed on the western edge of the Desert have passed into private ownership and are no longer available for public leases or permits.

Currently, 4.5 million acres in 53 grazing allotments and one sheep driveway are being leased to cattle and sheep interests. Approximately 75,000 sheep and 14,000 cattle obtain all or part of their sustenance from the California Desert. Sheep grazing is generally intermittent, but cattle use may be continuous or intermittent, depending on the locality and type of ranching operation, as well as the pattern of annual rainfall.

Grazing use within the CDCA depends, in large measure, on the climatic patterns as well as cultural and settlement characteristics that have developed through time. The amount, quality, and timing of forage production is controlled primarily by the amount and season of precipitation.

MINERALS

The CDCA was responsible for over 50 percent of California's mineral resource reserves in the 1979 fiscal year. The area has historically been a large producer of a wide variety of mineral commodities, including copper, lead, zinc, silver, gold, talc, and limestone. Alternative energy source potential is extremely high in the CDCA. The region contains concentrations of uranium, thorium, and lithium as well as Known Geothermal Resource Areas (KGRAs). Among the most significant economical resources of the Desert are widely available saleable commodities including sand, gravel and stone.

ENERGY AND UTILITIES

For over 40 years the California Desert Conservation Area has been crossed or used by an increasing number of energy and utility systems. These systems include high voltage electrical lines which carry 25 percent of the electrical energy for southern California; pipelines for water, oil and other petroleum products, and 65 percent of the natural gas used in southern California; coaxial cable and microwave towers for communications; aqueducts and canals for domestic and agricultural water; and sites for production of electrical energy.

LAND TENURE ADJUSTMENT

The land ownership pattern in the Calfiornia incorporates many scattered parcels of Federal, State and private properties. The Land Tenure Adjustment Element provides a management for increasing the effectiveness of resource administration by directly addressing problems created by fragmented patterns of land ownership.

Of the 25 million acres in the CDCA, 12,131,000 are directly adminstered by BLM. Other major land users or owners are: Military -- 3,172,000 acres; National Monuments -- 2,497,000 acres; State -- 885,000 acres; Southern Pacific Railroad - 819,000 acres.

SOCIOECONOMIC

The demographic environment of the CDCA is highly variable. About 2 percent (512,000) of California's population lives in the CDCA (about 25 percent of California's land area). The people patterns range from the older, leisure-oriented population of Riverside County to the agricultural families and workers of Imperial County. The greatest population growth has occurred and is expected on those areas close to the southern California metropolitan areas, especially in the Coachella Valley area, while other areas are struggling to grow at a rate of 2 percent. Keeping in mind the regional diversity within, trends for the CDCA as a whole can be described. The total CDCA population is expected to increase as percent by 2000, with the greatest change during that period coming between 1980 and 1990 when a 26 percent increase is anticipated.

The industrial and employment environment in the CDCA is diverse. Total employment in 1980 is approximately 192,000 up from 162,000 in 1976. The largest employment sectors by far are services and trade, with more than 44 percent of CDCA employment in these two sectors. That is a result of the relatively small manufacturing sector, the large number of retired people, and the high volume of visitors. The share of employment in the agricultural sector is significantly above the CDCA average in the areas which contain the Coachella, Palo Verde, and Imperial Valley, where agriculture is concentrated. Government employment -- specifically military -- is a major sector in the areas around Ridgecrest, Lancaster/Mojave, and Barstow/Victorville because of the presence of several large installations. The military becomes a major employer in these regions, supporting much of the retail and service section. Relative to the rest of California, CDCA employment is very dependent upon the minerals sector which contributes at least 7,900 jobs, not including the independent mineral prospectors.

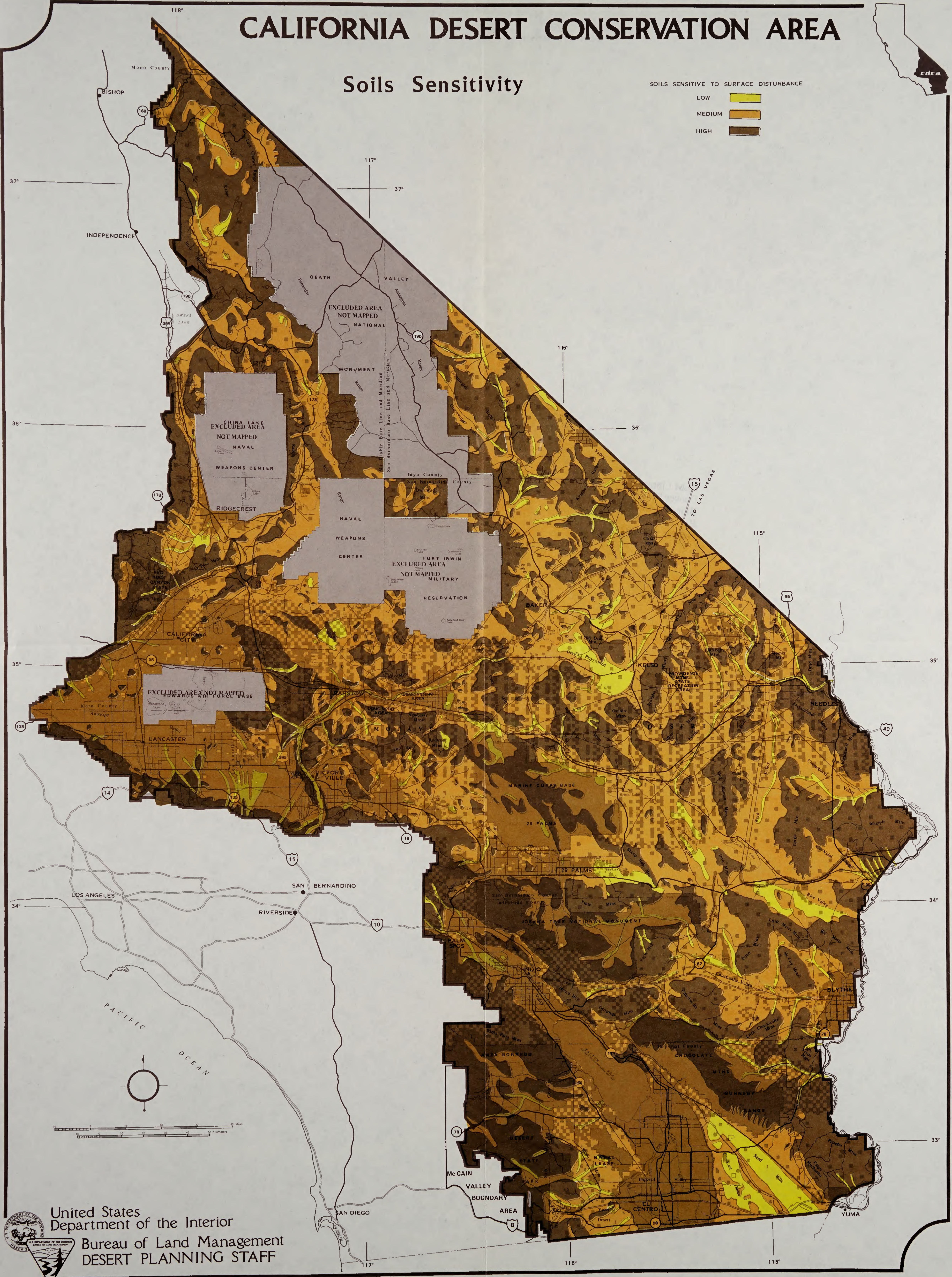
The people present in the CDCA at any given time may be divided into two groups: Desert residents and visitors. The lifestyles of the residents vary in the intensity of their interdependency with the natural resources environment from those of the livestock ranchers and small miners who are intimately entwined with the land to those whose concerns center primarily on their leisure time activities. The concerns and values of the visitors are likely to resemble those of the latter type of Desert resident -- centering primarily on recreational activities such as nature observation, ORV play, rockhounding, camping and sightseeing. Each of these groups is concerned about past and future BLM decisions restricting their use of the Desert, their feelings often becoming intense due to perceived threats to their livelihoods and/or lifestyles. It is with these concerns and values in mind that BLM has planned for the management of the public lands entrusted to them.

CALIFORNIA DESERT CONSERVATION AREA

Soils Sensitivity

SOILS SENSITIVE TO SURFACE DISTURBANCE

LOW	🟨
MEDIUM	🟧
HIGH	🟫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Mono County
BISHOP
168
INDEPENDENCE
190
395
OWENS LAKE
DEATH
VALLEY
EXCLUDED AREA NOT MAPPED
NATIONAL
MONUMENT
Panamint
Amargosa
Range
San Bernardino Base Line and Meridian
178
CHINA LAKE
EXCLUDED AREA
NOT MAPPED
NAVAL
WEAPONS CENTER
RIDGECREST
Inyo County
San Bernardino County
NAVAL
WEAPONS
CENTER
FORT IRWIN
EXCLUDED AREA
NOT MAPPED
MILITARY
RESERVATION
15
TO LAS VEGAS
BAKER
95
KELSO
PROVIDENCE MTNS STATE RECREATION AREA
NEEDLES
40
CALIFORNIA CITY
58
EXCLUDED AREA NOT MAPPED
EDWARDS AIR FORCE BASE
Kern County
Antelope
138
LANCASTER
BARSTOW
395
VICTORVILLE
MOJAVE
DESERT
14
138
18
MARINE CORPS BASE
29 PALMS
JOSHUA TREE NATIONAL MONUMENT
15
SAN BERNARDINO
LOS ANGELES
RIVERSIDE
10
PALM SPRINGS
INDIO
62
BLYTHE
78
ANZA BORREGO
CHOCOLATE
MTNS
GUNNERY
RANGE
86
78
DESERT
STATE
PARK
NAVAL LEASE
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VALLEY
BOUNDARY
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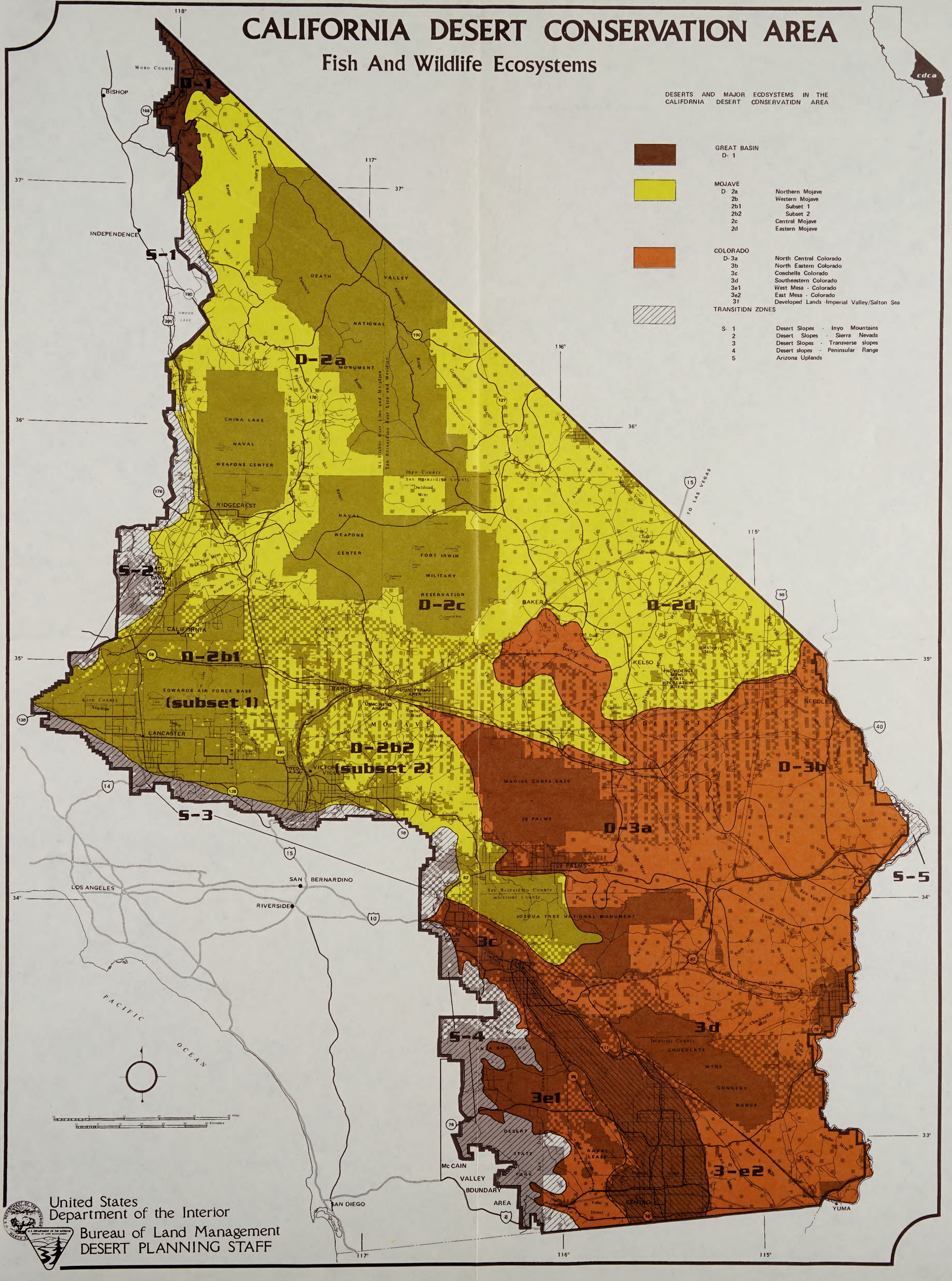
1990 when a 26 percent increase is anticipated.

CALIFORNIA DESERT CONSERVATION AREA

Fish And Wildlife Ecosystems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Mono County
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OWENS LAKE
D-1
S-1
D-2a
DEATH VALLEY NATIONAL MONUMENT
CHINA LAKE NAVAL WEAPONS CENTER
RIDGECREST
NAVAL WEAPONS CENTER
FORT IRWIN MILITARY RESERVATION
D-2c
Inyo County
San Bernardino County
TO LAS VEGAS
BAKER
D-2d
KELSO
PROVIDENCE MTNS STATE RECREATION AREA
S-2
CALIFORNIA CITY
D-2b1
EDWARDS AIR FORCE BASE
(subset 1)
Kern County
LANCASTER
BARSTOW
USMC YERMO AREA
USMC NEBO AREA
MOJAVE
D-2b2
(subset 2)
VICTORVILLE
NEEDLES
D-3b
MARINE CORPS BASE
29 PALMS
D-3a
S-3
S-5
LOS ANGELES
SAN BERNARDINO
RIVERSIDE
San Bernardino County
Riverside County
JOSHUA TREE NATIONAL MONUMENT
PALM SPGS
3c
INDIO
BLYTHE
3d
Imperial County
CHOCOLATE MTNS GUNNERY RANGE
S-4
ANZA BORREGO DESERT STATE PARK
3e1
NAVAL LEASE
3-e2
McCAIN VALLEY BOUNDARY AREA
SAN DIEGO
EL CENTRO
YUMA
PACIFIC OCEAN
Miles
Kilometers

DESERTS AND MAJOR ECOSYSTEMS IN THE CALIFORNIA DESERT CONSERVATION AREA

🟫	GREAT BASIN D- 1	
🟨	MOJAVE	
	D- 2a	Northern Mojave
	2b	Western Mojave
	2b1	Subset 1
	2b2	Subset 2
	2c	Central Mojave
	2d	Eastern Mojave
🟧	COLORADO	
	D- 3a	North Central Colorado
	3b	North Eastern Colorado
	3c	Coachella Colorado
	3d	Southeastern Colorado
	3e1	West Mesa - Colorado
	3e2	East Mesa - Colorado
	3f	Developed Lands -Imperial Valley/Salton Sea
▨	TRANSITION ZONES	
	S- 1	Desert Slopes - Inyo Mountains
	2	Desert Slopes - Sierra Nevada
	3	Desert Slopes - Transverse slopes
	4	Desert slopes - Peninsular Range
	5	Arizona Uplands

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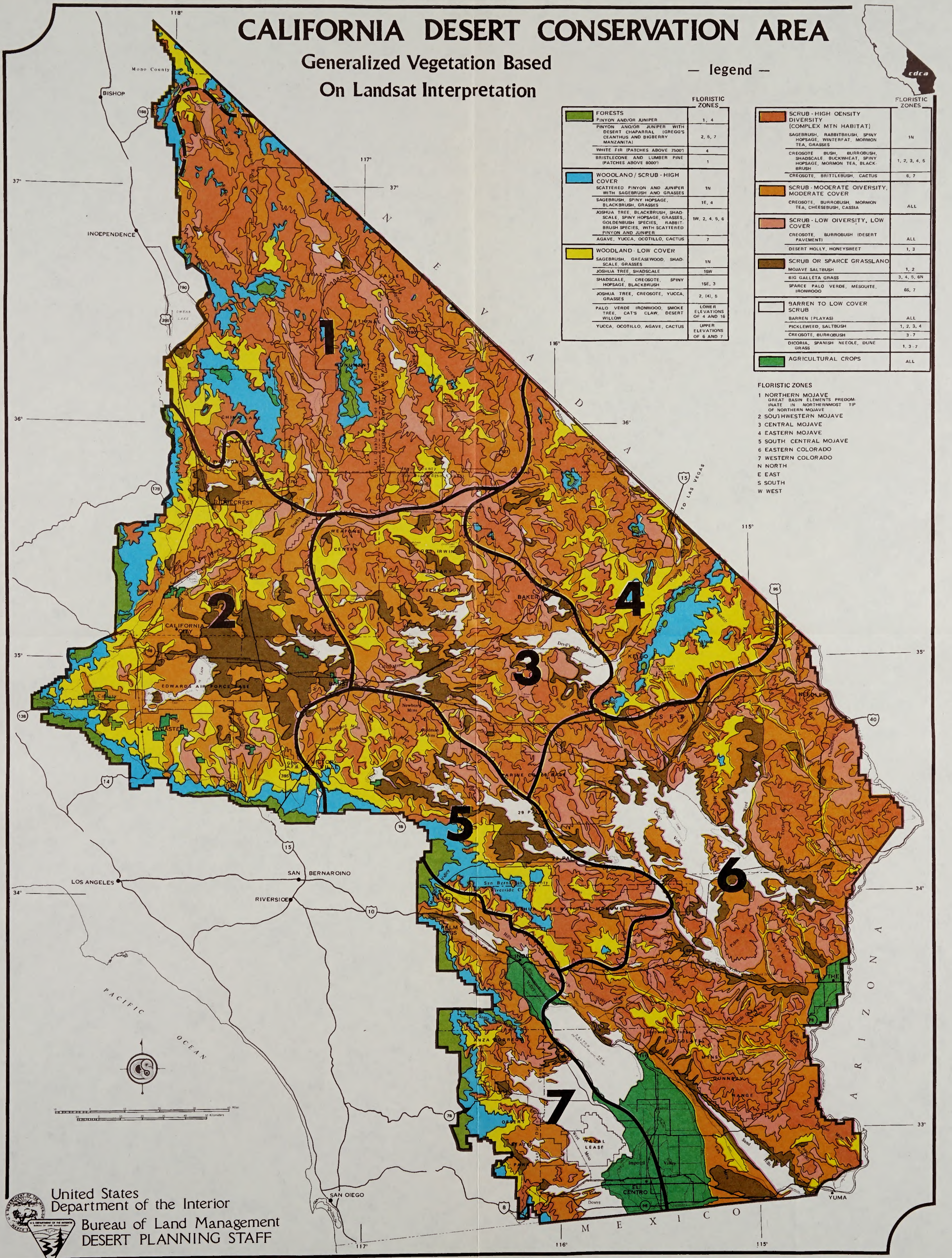
1990 when a 26 percent increase is anticipated.

CALIFORNIA DESERT CONSERVATION AREA

Generalized Vegetation Based On Landsat Interpretation



cdca
118°
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34°
33°
Mono County
BISHOP
INDEPENDENCE
OWENS LAKE
N E V A D A
A R I Z O N A
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P A C I F I C O C E A N
TO LAS VEGAS
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RIDGECREST
CALIFORNIA CITY
EDWARDS AIR FORCE BASE
LANCASTER
BAKER
KELSO
NEEDLES
FORT IRWIN
29 PALMS
LOS ANGELES
SAN BERNARDINO
RIVERSIDE
SAN DIEGO
EL CENTRO
YUMA
BLYTHE
ANZA BORREGO
NAVAL LEASE
Salton Sea
Imperial Valley
CHOCOLATE MTNS
168
178
190
395
138
14
18
15
10
40
95
78
86
8

— legend —

	FLORISTIC ZONES
🟩 **FORESTS**	
PINYON AND/OR JUNIPER	1, 4
PINYON AND/OR JUNIPER WITH DESERT CHAPARRAL (GREGG'S CEANTHUS AND BIGBERRY MANZANITA)	2, 5, 7
WHITE FIR (PATCHES ABOVE 7500')	4
BRISTLECONE AND LUMBER PINE (PATCHES ABOVE 8000')	1
🟦 **WOODLAND / SCRUB - HIGH COVER**	
SCATTERED PINYON AND JUNIPER WITH SAGEBRUSH AND GRASSES	1N
SAGEBRUSH, SPINY HOPSAGE, BLACKBRUSH, GRASSES	1E, 4
JOSHUA TREE, BLACKBRUSH, SHADSCALE, SPINY HOPSAGE, GRASSES, GOLDENBUSH SPECIES, RABBITBRUSH SPECIES, WITH SCATTERED PINYON AND JUNIPER	1W, 2, 4, 5, 6
AGAVE, YUCCA, OCOTILLO, CACTUS	7
🟨 **WOODLAND - LOW COVER**	
SAGEBRUSH, GREASEWOOD, SHADSCALE, GRASSES	1N
JOSHUA TREE, SHADSCALE	1SW
SHADSCALE, CREOSOTE, SPINY HOPSAGE, BLACKBRUSH	1SE, 3
JOSHUA TREE, CREOSOTE, YUCCA, GRASSES	2, (4), 5
PALO VERDE IRONWOOD, SMOKE TREE, CAT'S CLAW, DESERT WILLOW	LOWER ELEVATIONS OF 4 AND 16
YUCCA, OCOTILLO, AGAVE, CACTUS	UPPER ELEVATIONS OF 6 AND 7

	FLORISTIC ZONES
🟥 **SCRUB - HIGH DENSITY DIVERSITY (COMPLEX MTN HABITAT)**	
SAGEBRUSH, RABBITBRUSH, SPINY HOPSAGE, WINTERFAT, MORMON TEA, GRASSES	1N
CREOSOTE BUSH, BURROBUSH, SHADSCALE, BUCKWHEAT, SPINY HOPSAGE, MORMON TEA, BLACKBRUSH	1, 2, 3, 4, 5
CREOSOTE, BRITTLEBUSH, CACTUS	6, 7
🟧 **SCRUB - MODERATE DIVERSITY, MODERATE COVER**	
CREOSOTE, BURROBUSH, MORMON TEA, CHEESEBUSH, CASSIA	ALL
🟥 **SCRUB - LOW DIVERSITY, LOW COVER**	
CREOSOTE, BURROBUSH (DESERT PAVEMENT)	ALL
DESERT HOLLY, HONEYSWEET	1, 3
🟫 **SCRUB OR SPARCE GRASSLAND**	
MOJAVE SALTBUSH	1, 2
BIG GALLETA GRASS	3, 4, 5, 6N
SPARCE PALO VERDE, MESQUITE, IRONWOOD	6S, 7
⬜ **BARREN TO LOW COVER SCRUB**	
BARREN (PLAYAS)	ALL
PICKLEWEED, SALTBUSH	1, 2, 3, 4
CREOSOTE, BURROBUSH	3 - 7
DICORIA, SPANISH NEEDLE, DUNE GRASS	1, 3 - 7
🟩 **AGRICULTURAL CROPS**	ALL

FLORISTIC ZONES

1 NORTHERN MOJAVE
  GREAT BASIN ELEMENTS PREDOMINATE IN NORTHERNMOST TIP OF NORTHERN MOJAVE
2 SOUTHWESTERN MOJAVE
3 CENTRAL MOJAVE
4 EASTERN MOJAVE
5 SOUTH CENTRAL MOJAVE
6 EASTERN COLORADO
7 WESTERN COLORADO
N NORTH
E EAST
S SOUTH
W WEST

United States
Department of the Interior
Bureau of Land Management
DESERT PLANNING STAFF

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1990 when a 26 percent increase is anticipated.

Environmental Consequences

V

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A. METHODS AND ASSUMPTIONS 46
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A. Methods and Assumptions

This section has two parts. The first is the statement of the impacts of the Proposed Plan and alternatives; the second reviews the short and long-term consequences, the irreversible and irretrievable commitments, and the unavoidable adverse impacts of the Proposed Plan actions. A summary of the comparative impacts of the Proposed Plan and all alternatives is included as part of the Alternatives Considered chapter (See Section III - E).

The first part of this section states the impacts of the Proposed Plan and compares the impacts of all the alternatives as briefly and clearly as possible. To do this, the impact assessment approach has changed from that used in the Draft EIS. The significant impacts on the resources and uses of the Desert, described in the Affected Environment, are presented. For each resource use, a summary of the impacts of the Proposed Plan and a brief comparison of the impacts of all alternatives.

This approach is based on the resource issues raised and analyzed during the public review of the Draft Plan Alternatives and EIS. The real differences between alternatives result from different decisions to resolve those major resource issues. (For a brief description of the issues see Sec. II D, Major Issues.) Thus, for each resource and use the impacts described are those which result from the resolution of the major resource issues in the Plan. Public comment was helpful in developing this more effective way to state the significant impacts on the quality of the human environment in the CDCA which the actions of the Proposed Plan would cause, and to compare alternatives easily.

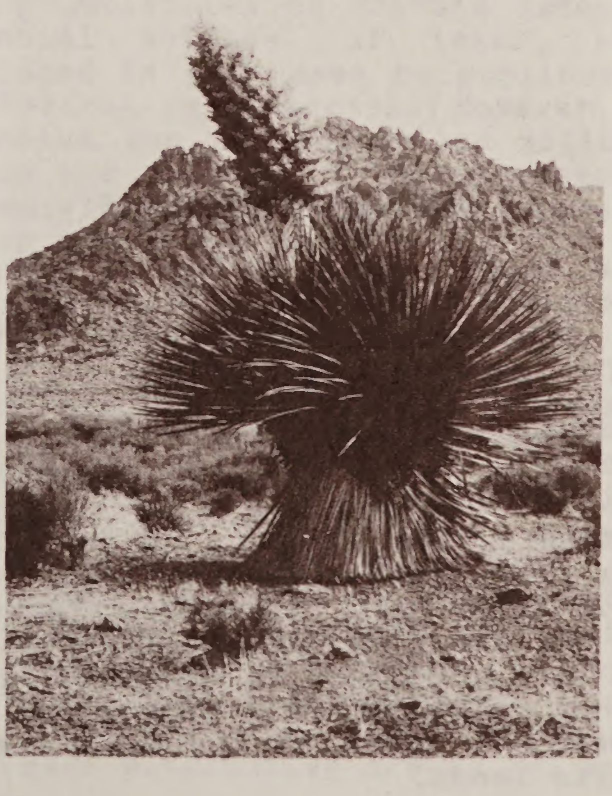
BACKGROUND MATERIAL

To keep this section reasonably short and clear, a large volume of background material has been excluded. Material taken from the draft document is summarized. Technological approaches, methodological detail, and scientific data and rationale are contained in the appendices (described in Sec. VII B) or in the documentation files of the California Desert District (See Sec. II F).

Common Baseline

A problem identified during public review of the Draft Plan Alternatives was one of inconsistent analysis. This flaw is difficult to avoid when trying to describe so many different kinds of resources and uses. However, a common set of assumptions was used for all analyses in this document.

The most important of these is the common baseline for measurement. Impacts are described in terms of changes to the existing situation, as analyzed in 1979 when the CDCA inventory was completed. In many cases the existing situation is not just a static condition, but a trend. We know, for example, that a certain wildlife population and its habitat are declining. To compare impacts of alternative plans we must state what significant change they will make relative to the existing situation. Will a downward trend accelerate? Will it slow? Will it stabilize? Will it reverse to an increasing trend?



Thus, this EIS states impacts relative to what is happening now, and not as they relate to a maximized or ideal hypothetical situation for any individual resource of use. This approach was used to describe impacts best in the context of the law, since the Federal Land Policy and Management Act requires multiple use of the public lands in the CDCA to include a "combination of resources and uses" and to give consideration to the "relative values of the resources."

POTENTIAL RISKS

Impacts from the CDCA Plan, more often than not, cannot be stated in precise terms. This is the nature of a comprehensive, long-range regional plan. The Plan will be the broad management guide under which much additional site-specific analysis, planning, environmental assessment, design and decision will take place before actions occur. For example, wilderness decisions go to Congress, power lines must be applied for and subject to an approval process, and competitive vehicle events must have a permit. As a result, most impacts on resources and uses must be considered as potential risks and their significance judged accordingly.

IMPLEMENTATION ASSUMED

A major factor in this regard is whether the direction given in any Plan alternative will be implemented on the ground. To avoid fruitless speculation for the purposes of analysis, it is assumed that the CDCA plan will be implemented as described in the implementation section of the Proposed Plan.

MITIGATING MEASURES

The significance of impact potential often depends upon the effectiveness of assumed subsequent mitigating actions. Thus, for example, the impact of a major power generating facility on air quality in the Desert depends upon the enforcement of air quality standards under Federal law by State and local authorities. Again, to avoid meaningless debate, it is assumed for analysis that all such laws, rules, regulations, and policies governing actions in the California Desert will be applied appropriately as the actions are considered, allowed, and take place under the general guidance of the CDCA plan for the public lands.

ANALYTICAL RANGE

The data and analysis in this section describes the environmental impacts of the Proposed Plan, any adverse impacts which cannot be avoided should the Plan be implemented, the relationship between short-term use and long-term consequences, and any irreversible and irretrievable commitment of resources if the proposed plan were implemented. It also summarizes impacts of the other Plan alternatives. Further information, if desired, can be obtained by reviewing the draft document.

The analysis in the final EIS attempts to address both direct and indirect impacts and their significance. Where appropriate, it describes conflicts with other agency land-use plans, policies, and controls. This analysis is particularly important in regard to military, county government, and Native American groups. Although the number of California Desert residents is small, the number of users is very large, so the analysis covers the impacts of urban users on the Desert and the resulting impacts of the users themselves, including the needs of future generations to use the Desert. Energy uses and conservation are also considered where appropriate in the analysis, as are the mitigation of adverse effects. Gaps in relevant information and scientific uncertainty are also reflected where appropriate.

GRAZING ANALYSIS

The livestock grazing portion of the impact analysis includes an additional treatment. This treatment summarizes all the significant impacts of grazing on other resources and uses of the Desert.

This analysis responds to a court decision requiring BLM to prepare environmental statements on livestock grazing throughout the public lands; this document is intended to serve that purpose for grazing on public lands in the CDCA.

OBJECTIVE TREATMENT

It is the purpose and intent of an EIS to present an objective statement of significant impacts on the quality of the human environment, not to attempt to justify a proposed action. This we have attempted to do as nearly as humanly possible. The many dedicated people who have helped to develop this document do, fortunately, feel very strongly about the different resources and uses of the desert. We have attempted not to use judgmental statements or conclusionary conjunctions, but some surely remain. For those that are still there, we apologize and the reader is respectfully requested to ignore them.

B. Impacts of Proposed Plan and Comparative Analysis

This part describes the impacts on each of the 18 resources and uses of the CDCA resulting from the way each of the major issues was resolved in the Proposed Plan. These impacts are then compared with those of other alternatives. The significant impacts noted may improve the resource or use, or they may diminish it. The 18 resources and uses are:

1. Air Quality
2. Water Resources
3. Soils
4. Vegetation
5. Wildlife
6. Wild Horse and Burros
7. Cultural Resources
8. Native American Values
9. Visual Resources
10. Wilderness
11. ACECs
12. Recreation
13. Motorized Vehicle Access
14. Livestock Grazing
15. Mineral Exploration and Development
16. Energy and Utilities
17. Land Tenure Adjustment
18. Socioeconomics

1. AIR QUALITY

Basis of Impact Analysis

The basis of impact analysis for air quality is the level of pollutants (sulfurdioxide, nitrogen dioxide, particulates, and ozone), anticipated as affecting those acreages of the CDCA where potentially air polluting activities can be expected to take place.

Relationship Between Impacts and Issues

ISSUES	SIGNIFICANT IMPACTS
Vehicle Access & "ORV"	Yes
Wildlife Protection	No
Wilderness	Yes
ACECs	No
Mineral Exp. & Dev.	No
Energy & Utilities	No
Burros	No
Cultural Res. Protection	No
Livestock Grazing	No
Recreation	No

Summary of Proposed Plan Impacts

Under the Proposed Plan, some degradation of air quality can be anticipated in relation to specific conditions and activities. Levels of pollutants from adjacent urban areas, e.g., Los Angeles and Orange County, are expected to adversely affect Desert air quality on a long-term basis.

Some permissible uses will temporarily increase localized blowsand and other airborne particulates. Such activities include motorized vehicle recreation events, some agricultural activities, "open" ORV" area use, and other temporary impacts on dry lakes. In some areas, it may be anticipated that these pollutant levels will temporarily exceed State air quality standards.

Positive actions contributing to the maintenance of high quality air standards will include the recommendation of areas suitable for wilderness designation, and ACECs and Class L management. These management actions decrease the potential for the production of pollutants by limiting or prohibiting development and consumptive uses.

Some potential activities which could substantially impact air quality do not fall within the purview of the Proposed Plan including, among others, new power plants, utility development, and some mining activities on private lands. These potential actions, if taken, would be regulated in all cases by applicable State and Federal regulations. However, a major objective for BLM-controlled actions taken within the context of the Proposed Plan is the maintenance of high quality air existing in the Desert today.

Comparative Analysis of Impacts by Alternative

The specific levels of pollutants which would result from implementation of the various alternatives cannot be accurately predicted. The potential for impact to air quality can, however, be directly related to the amount of land under each alternative which would be available for development, recreation, and other impacting activities. Comparative figures of public land acreage within the CDCA available for impacting activities under each alternative are as follows:

Alternatives	Percent of Class M & I	Percent of Class C & L	Percent Unclassified
No Action	61.4	36.3	2.3
Protection	5.8	92	2.2
Balanced	39.1	58.5	2.4
Use	75.5	22	2.5
Proposed	31.4	66.1	2.5

Comparison of these acreages shows there would be a decreasing level of air quality protection in the Protection, Proposed, Balanced, No Action, and Use Alternatives, respectively. In summary the Proposed Plan provides the second greatest level of protection of all alternatives.

2. WATER RESOURCES

Basis of Impact Analysis

The bases of impact analysis for water resources are the groundwater depletion rate and overdraft, water quality parameters, and in relation to mining, acres of land which are open to development.

Relationship Between Impacts and Issues

ISSUES	SIGNIFICANT IMPACT
Vehicle Access & "ORV"	No
Wildlife Protection	No
Wilderness	No
ACECs	No
Mineral Exp. & Dev.	No
Energy & Utilities	No
Burros	Yes
Cultural Res. Protection	No
Livestock Grazing	Yes
Recreation	No

Summary of Proposed Plan Impacts

Potential impacts to water resources can result from any activity which adversely affects water quality or availability in the CDCA. Utilization of both surface and groundwater resources is limited, in many cases, by high quantities of dissolved solids (ranging from 500 to 100,000 milligrams/liter).

Impacts from mining and energy development will be extremely limited because the majority of mining activities in the Desert employ closed-loop processing systems with an annual water consumption rate of only one to two acre-feet per facility, per year. Surface water, employed by many existing facilities, is predominantly acquired, from the Colorado River Aqueduct and the California State Water Project. Since most mineral processing and potential energy development facilities require water with relatively low levels of dissolved solids, it is anticipated that imported water sources will be employed in future development of such facilities. The Proposed Plan should not have a significant adverse impact on groundwater resources.

No significant impacts to water quality are anticipated from mineral, energy or other development activities. Effluents and waste water quality are stringently regulated by both State and Federal legislation. All use and development-oriented activities will be subject to applicable policy and legal constraint. In addition, impacts will be fully analyzed in formal State and Federal environmental documents.

Both the quality and quantity of surface water resources should improve under the Proposed Plan. Reduction of impacts will occur through the implementation of the Wild Horse and Burro and Livestock Grazing Elements. The Livestock Grazing Element incorporates specific proposals for the development of new water sources and the restoration and maintenance of existing water sources. The Proposed Plan will significantly limit burro populations, thus reducing impacts on springs, riparian habitats, and other sensitive Desert water resources.

Comparative Analysis of Impacts by Alternative

All consumptive uses which could potentially impact water resources are subject to consistent State and Federal policy and regulation. In this context it is anticipated that there will be little variation in impact levels among the alternatives for such activities as energy generation facilities, mining and/or industry.

Significant differences in levels of burro populations and livestock grazing guidelines produce a wide variation in level of impact between the No Action Alternative and the Proposed Plan. Water quality would be most positively affected by the Proposed Plan, with decreasing levels of protection under the Protection, Balanced, Use, and No Action Alternatives, respectively.

3. SOILS

Basis of Impact Analysis

Impacts to soil resources have been evaluated in terms of the projected acreage of disturbed soils. Potential type and degree of soil modification has been evaluated in response to each Plan activity which would have a significant impact on the resource.

Relationship Between Impacts and Issues

ISSUES	SIGNIFICANT IMPACTS
Vehicle Access & "ORV"	Yes
Wildlife Protection	No
Wilderness	No
ACECs	No
Mineral Exp. & Dev.	Yes
Energy & Utilities	Yes
Burros	Yes
Cultural Res. Protection	No
Livestock Grazing	Yes
Recreation	No

Summary of Proposed Plan Impacts

The Proposed Plan will result in some accelerated soil erosion and compaction by the year 2000. From a regional perspective the magnitude of impact is relatively slight. Less than one percent of the total soils in the CDCA will be highly impacted as a result of the Proposed Plan. From a local perspective, impacts in some areas will be severe, and may even involve complete removal of the soil horizons. A more extensive area will be subject to moderate impacts.

The principal causes of impact to soils are mining and motorized vehicle access. Livestock grazing, burros, and energy production and transmission will also contribute to soil impacts, but to a much more limited extent.

It is estimated that only 25,000 additional acres of public lands in the CDCA will be disturbed by mineral exploration and development through the year 2000. This amount is a cumulative total of all mining operations expected to occur throughout the CDCA. Specific areas of soil disturbance will range from less than one acre, in the case of an exploratory drill site, to several thousand acres, in the case of an open pit mine. The location and number of future mines has not been predicted; however, a total of approximately 37,000 acres have been disturbed to date by mining, including open pit operations (13,385 acres), underground operations (1,249 acres), solution mining (9,525 acres), and gravel extraction (6,688 acres). An additional 16 percent of the total is associated with small mines and roads.

Impacts from off-road vehicle "free play" will be greatest within "open" areas, but will also be associated with competitive events and new routes of travel.

"Open" areas in the Proposed Plan cover approximately 485,000 acres, including existing "open" areas. The total amount of potential soil disturbance from this use has not been predicted. Free-play use is expected to decline approximately 10 percent during the life of the Plan. Since recovery rate in the Desert is extremely slow, the amount of cumulative disturbance will probably increase. The places of greatest impact will be pit areas, hill climbs and areas with many trails within "open" areas. As of 1979, approximately 47,900 acres had been disturbed by motorized vehicles, including camping and pit areas (1,229 acres), hill climbs (5,943 acres), and areas in which there is a high frequency of highly compacted trails (40,765 acres).

Comparative Analysis of Impacts by Alternative

On a desertwide basis there would be little significant difference between alternatives. Furthermore, the approximate total of highly-impacted soils for any alternative will be less than one percent of the CDCA.

On a relative basis, the Use Alternative would have the highest level of adverse affect on soil resources. The remaining alternatives would produce reduced levels of impact; in decreasing level of adverse impact: the No Action Alternative, Balanced, Protection, and Proposed Plan. In the Proposed Plan, impact to soil resources will be reduced by limiting the use of roads and reducing the proliferation of new routes of travel through Class I, coupled with the accelerated identification of roads in Class M. Additionally, monitoring of vehicle impacts will permit speedy action to reduce potential impacts associated with Class M.

Total adverse impacts related to mining will be similar in all alternatives. However, the pattern of mining and associated impacts will vary according to the distribution of Class C and, to a lesser extent, Class L areas. The Proposed Plan presents the best effort to resolve conflicts between mining and other resource/uses.

Impacts from livestock and burros will be limited to concentration areas around water sources and will probably not exceed approximately 1,400 acres total. The reduction and positive management of burros under the Proposed Plan will have a beneficial effect on soils in these areas.

Energy production and transmission facilities would have severe localized impacts but, on a desertwide basis, would not be significant, regardless of alternative.

4. VEGETATION

Basis of Impact Analysis

The basis of analysis consists of the effect of Plan actions upon the number of rare, threatened, or endangered plant localities and unusual plant assemblages, and the condition and trend of vegetation in general.

Relationship Between Impacts and Issues

ISSUES	SIGNIFICANT IMPACTS
Vehicle Access & "ORV"	Yes
Wildlife Protection	No
Wilderness	Yes
ACECs	Yes
Mineral Exp. & Dev.	Yes
Energy and Utilities	No
Burros	Yes
Cultural Res. Protection	No
Livestock Grazing	Yes
Recreation	No

Summary of Proposed Plan Impacts

Vehicle access management actions in the Proposed Plan will significantly reduce vegetation loss through the control of unrestrained vehicle use. Motor vehicle events can only occur on approved routes of travel in Class L and existing routes in Class M which will be monitored. These designations will limit the proliferation of vehicle routes on 96 percent of the public lands in the CDCA. Also, any major vehicle events will be subject to environmental analysis before implementation, including consideration of vegetative resources. Therefore, no significant loss of rare, threatened, or endangered plants or UPAs is anticipated under the Proposed Plan.

In some areas impacts will be severe. In ORV pit and camping areas, vegetative cover removal may be as high as 90 to 100 percent. On trails radiating from these vehicle concentration areas, cover removal can vary from less than 30 percent to 95 percent. In areas where single or infrequent vehicle passess occur change to vegetative cover should be less than one percent. There are currently approximately 48,000 acres of disturbed vegetation in existing "open" areas. By the year 2000, it is expected that only about .07 percent of the total biomass of the CDCA would be affected in "open" areas recommended in the Proposed Plan.

Eighteen plant species protected by BLM policy in 23 verified collection or observation sites within Classes M and I are potentially impactable by mineral development and exploration. However, specific mitigating measures developed for mineral development during implementation could reduce impacts.

Although the construction of power plants, transmission corridors, etc. will destroy vegetation, the amount of the vegetation destroyed is insignificant relative to the total vegetation of the CDCA. Adverse impacts on rare, threatened, or endangered plants and UPAs will be mitigated due to the site-specific environmental analyses required.

Four species are listed by the State of California and one will be listed in 1980 by the U.S. Fish and Wildlife Service. Consultations will, therefore, be required on any action which would adversely affect these particular species.

Significant positive impacts to vegetation, especially rare, threatened, or endangered plants and unusual plant assemblages, are anticipated due to the protective nature of wilderness designation. Excluding the Algodones Dunes, 67 percent of the known localities of Federal and State-listed plants, 30 percent of the known localities of candidates for Federal listing, and 26 percent of the known localities of plant species of special concern occur in areas recommended as suitable for wilderness designation. Portions of 21 UPAs occur in such areas. Four UPAs--the Eureka Valley Dunes Psammophytic Assemblage, the Mountains Springs Grade Blackbrush Assemblage, the Smuggler's Cave Chaparrel Assemblage, and the Davies Valley Succulent Scrub Assemblage--are located wholly within such areas. In addition, 95 percent of the Kelso Dunes Psammophytic Assemblage, 85 percent of the Inyo-Panamint Mountains Bristlecone Pine Stands, and 75 percent of the Pipes Canyon Huge Joshua Trees are included within these recommended areas.

The Proposed Plan added 9 areas of Critical Environmental Concern (ACECs) to provide habitat protection for rare, threatened, or endangered plants. The impact of these proposed ACECs is significantly positive. Several UPAs will be protected by ACEC designation.

The overall impact of livestock grazing and wild horse and burro managment is expected to significantly benefit the protection of vegetative resources. Substantial reductions in the populations and numbers of wild horses and burros will significantly improve the natural ecological balance, thereby improving sensitive vegetation systems. Adjustment of livestock grazing under carrying capacity levels will benefit vegetation by improving condition and causing trends to move in an upward direction.

Elimination of burros at Big Sand Spring will have a positive impact on Astragalus lentiginosus var. sesquimetralis, a Federal candidate for endangered species designation. No specific protection is offered for Nitrophila mohavensis, a Federal candidate species which occurs in a horse concentration area. BLM will continue to monitor the number and distribution of horses in this area.

Twenty-one UPAs and 22 rare, threatened, or endangered plants occur within the 17 wild horse and burro Herd Management Areas proposed. Management of these herds at proper levels is expected to significantly reduce the potential impact to vegetative resources.

Impacts on rare, threatened, and endangered plants and unique plant assemblages from Proposed Plan actions are expected to be negligible. Many areas of sensitive vegetative resources will be protected through control of motorized vehicle use, consumptive recreational activities, intensive grazing, and high concentrations of wild horse and burro populations.

Comparative Analysis of Impacts by Alternative

The greatest impact on rare, threatened, and endangered species and unusual plant assemblages would occur in the No Action Alternative. The Use, Balanced, and Protection Alternatives and the Proposed Plan provide increasing levels of protection, respectively.

5. WILDLIFE

Basis of Impact Analysis

The basis of measurement is effects on Federally or State listed species on public lands, effects on sensitive species on public lands, effects on acres of general wildlife habitat under BLM administration, and effects on the condition and trend of BLM-administered wildlife habitat.

There are many measures of the relative health of wildlife habitats. These include species diversity, number of species, and total abundance. These have been measured at key areas within the Desert, such as at Afton Canyon, using a wildlife ecosystem approach. The health of these sites was used for evaluating the Plan desertwide.

Relationship Between Impacts and Issues

ISSUES	SIGNIFICANT IMPACTS
Vehicle Access & "ORV"	Yes
Wildlife Protection	Yes
Wilderness	Yes
ACECs	Yes
Mineral Exp & Dev	Yes
Energy & Utilities	Yes
Burros	Yes
Cultural Res. Protection	No
Livestock Grazing	Yes
Recreation	Yes
Other: Land Tenure Adjustment	Yes

Summary of Proposed Plan Impacts

Impacts on wildlife are frequently considered the bellwether of environmental consequences (the "canary in the coal mine" concept). Therefore, a substantial amount of space is devoted to this portion of the statement of impacts, and a separate discussion is included for each issue.

VEHICLE ACCESS & ORV

Vehicle use on and off-road in the CDCA directly and indirectly impacts wildlife resources. Most documented impacts -- physical destruction of habitat, interference with natural processes and the killing of individual animals -- occur in vehicle use "open" areas. The Proposed Plan calls for 485,000 acres of "open" areas, or about four percent of CDCA public lands. These areas are located in areas less sensitive to wildlife and do not jeopardize Federal or State-listed species.

Wildlife impacts due to general access under the multiple-use class guidelines are both direct and indirect. No direct habitat impacts occur due to travel on approved or existing routes of travel. The impact is individual animal death by passage of vehicles on routes of travel in Class M and L areas. Under the Proposed Plan the amount of areas in approved routes increases from 28 percent under the No Action Alternatives to 48 percent of the CDCA public lands.

In addition, all vehicular travel will be prohibited on the 2,257,000 acres designated Class C, designated dunes and playas, and some ACECs, thus eliminating vehicle access impacts there.

Indirect impacts include stress on wildlife populations from noise of vehicles, presence of people, dust, and changes in vegetation caused by dust or water runoff patterns near roads.

Vandalism will continue to be a serious impact for many wildlife species. Criteria for approving routes of travel in Class L will consider this threat, and it will also be considered in the 73 Areas of Critical Environmental Concern (ACECs).

Allowance of off-road vehicle organized events will occur under a permit system, with evaluation of environmental consequences of each event. Areas of concentrated use, such as start/finish and pit areas, will severely affect habitat quality on small parcels in Classes M and I. The Proposed Plan does not permit these high impact activities to occur in Class L. Thus, with Classes C and L taken together, high-intensity impacts will not occur anywhere within 8 million acres of public land.

Free play occurring in, but not restricted to, "open" areas is generally considered to be the greatest impact upon and threat to wildlife resources. A basic assumption of the Proposed Plan is that effective implementation of multiple-use class guidelines and management prescriptions will occur. Based upon this assumption, habitat conditions in areas presently designated as "open", but with the designation changed to a more restrictive category in the Proposed Plan (such as Rand Mountain), can be expected to improve relative to existing situations. A large portion of Fremont/Stoddard Valley is in Class L, specifically for enhancement of habitat for the desert tortoise, and vehicular activity will be restricted to approved routes of travel. This will ameliorate the existing situation. Areas not previously designated as "open", but now designated as such (Rasor Ranch area), can be expected to significantly decline in terms of habitat quality and species diversity. A potential problem exists in the Rasor Ranch "open" area (covering 15,600 acres) in connection with maintained integrity of the adjacent Soda Springs ACEC. The Proposed Plan will contain a management arrangement with access to the most sensitive area denied to the public except for those authorized by BLM, or student groups authorized and supervised by the California State University Desert Studies Center.

WILDLIFE PROTECTION

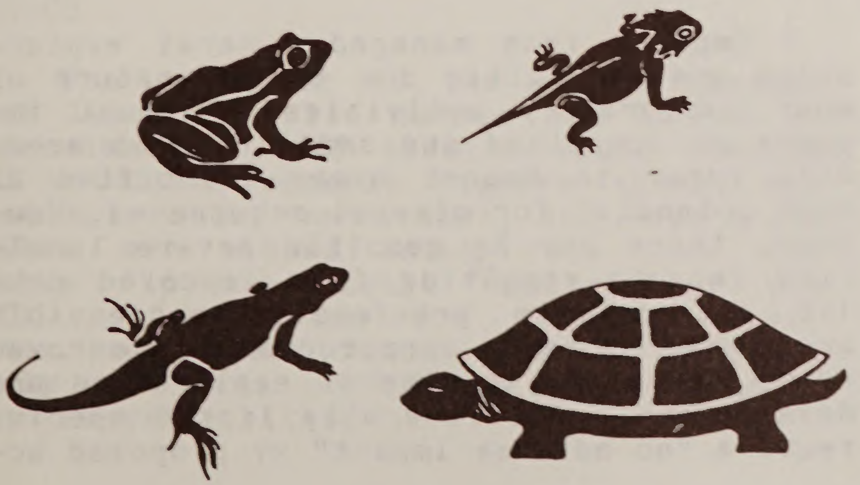
Highly beneficial effects to wildlife resources are anticipated through the effective implementation of Habitat Management Plans (HMPs). Habitat Management Plans, either already written or proposed, and restrictions called for in the multiple-use class guidelines, will benefit the peninsular bighorn sheep and desert slender salamander (Santa Rosa HMP), Mohave chub (Soda Springs HMP), desert pupfish and California black rail (Salt Creek HMP), Inyo Mountain slender salamander (Inyo Mountain HMP), San Sebastian leopard frog, Coachella Valley fringe-toed lizard, and desert bighorn sheep. Within all these HMPs the general health of the habitat should improve. Success will be judged by the effect on the key species.

Designation of Multiple-Use Classes C and L and route approvals in the Proposed Plan will provide protection for wildlife resources in a greater degree than the existing situation throughout the CDCA. Large portions of nine wildlife desert ecosystems will have extensive areas protected in Classes C and L. Six ecosystems may experience continuing declines in wildlife habitat and populations. These areas are generally close to urban centers or large blocks of developed private lands, or are areas having higher proportions of use-oriented Classes M and I, and receive priority consideration for monitoring and enforcement in Plan implementation.

The Proposed Plan will maintain current conditions on 70 percent of the special habitat areas. Through implementation of Multiple-Use Classes C and L, Habitat Management Plans, and route approval, these areas should improve over the life of the Plan. Notable exceptions include significant parts or all of a number of areas which are either currently declining or are expected to have accelerated declines because of continuation or expansion of intensive uses. These include: Lee Flat Shadscale Scrub Habitat, Butterbread-Jawbone Canyons, Cima Dome, Pisgah Lava Flow, Rice Valley Dunes, and Imperial Sand Dunes "open" area. The impacts which may be adverse to wildlife include: ORV use, livestock grazing, burros, and intensive visitor use. Some of these are in Class I. The total area included here is about 71,000 acres or 0.6 percent of the public lands in the CDCA. The Proposed Plan provides for mitigation in these areas; e.g., burro removal or limiting ORV use to a smaller area, combined with protection of large portions of the balance of the ecosystem.

There are seven federally listed species in the CDCA. The status of five species which have potential habitat on scattered parcels of public land around the Salton Sea (brown pelican, Aleutian Canada goose, bald eagle, peregrine falcon, and Yuma clapper rail) is undetermined. The Proposed Plan will change this habitat from the present situation. Any changes subsequently proposed will be fully evaluated for wildlife impacts. There is potential for watershed near the habitat of the desert slender salamander to receive greater protection from proposed land acquisition. The Mohave chub habitat at Soda Springs currently is managed through a Habitat Management Plan and the area is within a designated ACEC; thus, the status of the population and its habitat should continue to improve.

Ten State-listed rare and endangered species have potential for receiving more protection and/or improvement to parts of their habitats under the Proposed Plan. For example, the desert pupfish and California black rail habitat would receive additional protection at the Salt Creek ACEC. Habitat around and adjacent to the Salton Sea would receive more protection under special stipulations in the Land Tenure Adjustment and Geology-Energy-Minerals Elements if such activity takes place. ACECs would include most of, if not all, the known public land habitat of the black toad, California yellow- billed cuckoo, Least Bell's vireo, Inyo brown towhee, and Amargosa vole. Habitat of the peninsular bighorn sheep has potential for receiving more protection from Class C designations and from implementation of the existing Habitat Management Plan. Coachella Valley fringe-toed lizard habitat, which is currently in declining condition, will receive potentially greater protection from preparation and implementation of the proposed Habitat Management Plan.



Habitat and population conditions for some State-listed species will not change significantly from the existing situation. For example, the elf owl has one known recent historic breeding locality on BLM-administered lands in the ACEC at Corn Springs. Current human-related uses at Corn Springs may not promote the return of the species.

Habitat quality at a potential California bighorn sheep reintroduction site is declining and will continue to decline under the Proposed Plan. Potential habitat for the Tehachapi slender salamander currently is declining in quality. The Plan will reduce this decline or halt it on 86 percent of the habitat. Mohave ground squirrel habitat is currently declining in condition throughout much of its geographic range, though much of the impact is on private land. No improvement may be expected on 51 percent of its total habitat, though Class L designation will bring about positive change on the other half where public land is involved.

There are seven BLM sensitive species: Amargosa River pupfish, Nevada speckled dace, Inyo slender salamander, flat-tailed horned lizard, desert tortoise, golden eagle, and desert bighorn sheep. A large portion of the habitats of the Nevada speckled dace and Amargosa River pupfish habitats may stabilize from the Proposed Plan as a result of the Amargosa River/Grimshaw Lake ACEC. Habitat for the Inyo slender salamander would benefit compared to the existing situation with the implementation of the Inyo Mountains Habitat Management Plan and the proposed reduction of wild burros.

Implementation of the San Sebastian ACEC plan and Habitat Management Plan will help protect remaining San Sebastian leopard frogs and stabilize or improve the existing site.

Habitat for the flat-tailed horned lizard is currently affected by ORV use and could be affected by geothermal steam exploration and development. The Proposed Plan establishes two ACECs with special emphasis for the species on both sides of the Imperial Valley and provides for special stipulations related to geothermal activity. Vehicle access will be limited by approved routes of travel in much of the area and the ORV "open" area will not be expanded beyond its present size.

Desert tortoise numbers are generally in a state of decline throughout much of the CDCA. Under the Proposed Plan, large areas of class L should manage vehicle and public access, reducing habitat effects. Four major and three minor crucial habitat areas have been identified within the CDCA, parts of which are considered necessary to maintain the continued existence of the species. Under the implementation commitments of the Proposed Plan, tortoise numbers will be monitored. Under the monitoring systems, special emphasis will be placed on both vehicle access and livestock mangement. The Proposed Plan should enhance habitat condition in several of the key areas such as Chuckwalla Bench and Ivanpah Valley. In some areas the Plan may, at best, be neutral. Adverse effects on habitat in some areas over the years may have reduced populations below threshold levels.

The majority of known nest sites for the golden eagle (a sensitive species) and prairie falcon occur within seven large geographic areas. Five of these areas currently proposed are in relatively stable condition and the Plan will not improve or not affect these. The two geographic areas with the greatest nest concentrations (the Sierra/Red Mountain and Newberry/Granite Mountain raptor areas) are in declining condition and could have high potential for continuation of existing downward trends because of the high amount of urban impacts and private land development nearby.

Desert bighorn sheep populations are generally in declining condition in the CDCA. Under the Proposed Plan, several herds in mountain ranges in the northern Mojave may stabilize or increase as a result of burro reductions, changes in livestock management and wilderness. Eight important desert bighorn herds in the eastern Mojave may not improve, although special allowances have been made with regard to livestock limitation. In the ranges south of I-40, the Proposed Plan emphasizes management of bighorn sheep and should result in habitat improvement. Peninsular bighorn should also improve under the Proposed Plan both as a result of Class C in the Santa Rosa Mountains and of the new Habitat Management Plan now ready for implementation.

WILDERNESS

The recommendation of 2,074,000 acres for wilderness designation will, through wilderness management plans, benefit several species, notably peninsular and desert bighorn sheep. Some Class C areas include only portions of important bighorn habitat. Wilderness management should bring about general improvement to habitats on the one-sixth of the CDCA public lands so designated though, in some areas, access is so limited now that conditions are not likely to change perceptibly.

As a consequence of wilderness, access to previously built water sources and catchments (built cooperatively by the California Fish and Game Department and BLM) for periodic maintenance could be limited. However, management plans will take the presence of these into consideration and recognize that management of California Desert wilderness and improvement of habitat will require special provisions; thus, no adverse consequences are anticipated.

ACECs

The designation of ACECs will, in general, benefit wildlife resources. Many significant species and their habitats are protected under ACEC management prescriptions. All or most of the public lard habitats of the federally listed Mohave chub and State-listed black toad, magic gecko, California yellow-billed cuckoo, Least Bell's vireo, Inyo brown towhee and Amargosa vole are protected under ACEC designation. The Inyo brown towhee and Amargosa vole are protected under ACEC designation. The same is true for the San Sebastian leopard frog. Large portions of habitat for the Nevada speckled dace and Amargosa River pupfish are also protected under ACEC management prescriptions.

Several designated ACECs proposed for other sensitive resource protection may have management prescriptions which do not specifically enhance wildlife habitat. However, on balance, the designation and special management and protection on 574,000 acres should be beneficial to habitat and to specific populations as well as reducing human influences and interference.

MINERAL EXPLORATION & DEVELOPMENT

Impacts from managed mineral exploration are negligible due to the nature of most exploratory activities. Direct impacts on localized and small habitat areas will occur in Desert areas identified as high potential for mineral occurrence. However, there may be possible severe localized impacts resulting from improved public access into previously inaccessible areas due to newly constructed or improved roads requisite to mineral exploration and development. All federally listed species require "no adverse impact" by proposed actions. Special stipulations are adequate to ensure this requirement.

Mineral development will occur on approximately 25,000 additional acres by the year 2000. Affected areas will be scattered and localized. There is a potential for significant impacts on selected species by mineral development especially from geothermal and oil and gas. The adverse impact on the Rose Valley population of Mohave ground squirrel could be significant due to potential geothermal development. This population is considered to be representative of the northernmost limits of occurrence and approximately 92 percent of the localized habitat could be affected. This is less than 5 percent of the total range.

Oil and gas potential in the Ivanpah, Mesquite, and Pahrump Valleys is low under existing technology, but threats to the tortoise population could be potentially significant. Most of the area is in Class L, particularly Ivanpah, specifically to assure careful development of mineral resources if any occur.

ENERGY AND UTILITIES

Identification of approved energy transmission corridors significantly reduces potential risk of impacts on wildlife populations. Residual impacts are related to travel on necessary access routes within these corridors, with interference to natural processes occurring intermittently. Local and short-term impacts will occur during construction phases. Long-term effects will be primarily in the form of loss of habitat, limited to the acreage in new access roads and town sites. Significant impacts to wildlife may occur on the corridor on East Mesa, though its occupation by more than one line is doubtful, and the short corridor south of Needles. All other corridors in the Proposed Plan currently have existing transmission lines and access routes.

Energy production will occur in selected locations under strict environmental controls and will have little potential for significant impacts to wildlife, except in the immediate area of construction and development.

BURROS

The reduction to the proper management level for wild horses and burros to approximately 3,025 animals would benefit all wildlife, notably bighorn sheep, but also mule deer, burro deer, the Inyo brown towhee and others which rely upon the scarce riparian/aquatic habitats of the CDCA. Competition for forage, water, cover, and space would decline, particularly in areas of identified conflicts, such as water sites.

Emphasis in the Proposed Plan will be on removal of burros in areas where they are now causing the greatest conflict with sensitive wildlife species and natural systems.

RECREATION

Few significant impacts on wildlife are anticipated from resolution of general Recreation issues. The possible exception is the potential for reintroduction of the elf owl at Corn Springs. The Proposed Plan will provide for a greater BLM field presence for enforcement, encourage education and interpretation, and improve general visitor compliance.

The Proposed Plan may improve huntable populations of deer, quail, and other species, thereby increasing recreational opportunities. Vandalism, including shooting of protected wildlife species, continues to be a problem, but expanded BLM field presence may reduce amounts.

LIVESTOCK GRAZING

The impact of livestock grazing decisions in the Proposed Plan will improve conditions for wildlife in the CDCA. The Proposed Plan provides for certain wildlife requirements to be met before grazing takes place. (See Livestock Grazing impacts in this chapter.) The Proposed Plan reduces perennial forage allocations to livestock by approximately 25 percent desertwide and makes specific forage allocations to improve habitat for desert tortoise and desert bighorn sheep and to improve range conditions. Specific forage allocations are not given for the Mohave ground squirrel, but this will receive recognition in Allotment Management Plans (AMPs) as will other species. AMPs will further improve habitat conditions by measures to improve composition and density of vegetation.

Specific habitats or habitat types will receive consideration in AMPs or, in the case of important, sensitive, or unique habitats such as riparian areas, will be protected thorough either AMPs or other management prescriptions; e.g., ACECs, HMPs, where plans may call for exclusion of livestock.

LAND TENURE ADJUSTMENT

There will be positive impacts to wildlife from the land tenure adjustment program in the Proposed Plan. Overall, upon Plan implementation, BLM will acquire key tracts for wilderness. Also, the land tenure program is based on resolving key issues. If wildlife is a key issue, lands can be transferred or not transferred to resolve the wildlife issue.

Comparative Analysis of Impacts by Alternative

NO ACTION

Under the No Action Alternative there would be no ACECs and no wilderness; thus, a static condition at best and continued decline in habitat condition could be expected on over 2.5 million acres. Few active programs could be implemented, though motorized vehicle access would continue under the Interim Critical Management Plan (ICMP). Substantial portions of desert tortoise crucial habitat would continue to decline as a result of uncontrolled ORV free play in several areas. Decline in numbers to the extent of extirpation or extinction could occur for several species, particularly those now offically listed, and for which specific ACECs or Class C and L designations in the Proposed Plan are geared.

PROTECTION

The Protection Alternative Draft EIS Analysis presented in the Draft Plan Alternatives document stated that there were potential negative impacts to officially listed rare, threatened, or endangered species. This was in error, because of a misinterpretation of the Land Tenure Adjustment Element. The development of the Proposed Plan considered this and incorporates corrective changes into the Proposed Plan. Specific changes include stipulations in the Land Tenure Adjustment and Geology-Energy-Minerals Elements to eliminate the potential for deleterious impacts to habitat on unclassified public lands, especially around the Salton Sea.

With the high percentage of land (92 percent of all CDCA public land) proposed in Classes C and L, the trend in wildlife habitat quality would be turned toward pristine conditions. Past impacts of deleterious use would inhibit rate of change in some very high-use areas. Public access would be greatly controlled and much human activity would be largely curtailed. As such, most wildlife habitats would be only moderately and temporarily affected seasonally through light livestock grazing and some ORV use. ORV open areas would constitute 0.8 percent of public lands in the CDCA, thereby drastically reducing chances of vehicle impact on wildlife in the CDCA except in roadways.

BALANCED

The Balanced Alternative would not have the same overall net benefit to wildlife resources as the Protection Alternative. Positive wildlife actions (Habitat Management Plans, restrictive ACEC management prescriptions) are fewer. Yet, the amount of the land in Classes C and L would amount to 58 percent of the CDCA public lands.

The Mohave ground squirrel and black toad could receive impacts in portions of their habitats outside ACECs and Classes C and L to the extent that further condition decline over part of their range on public land could occur over the life of the Plan. Desert tortoise would be impacted by continued ORV use in both open and existing roads and trail areas within crucial habitat, particularly in the Fremont-Stoddard Valley area. Other tortoise areas, such as Ivanpah Valley, would be neutrally impacted, since ORV use is low at present and the alternative provides for vehicle access on only routes of travel through Class L.

Flat-tailed horned lizard habitat could be potentially impacted as a result of geothermal steam development within its habitat, combined with vehicle access on routes of travel. While the Balanced Alternative calls for stipulations on use and development, road proliferation as a result of exploration would have a potentially negative impact and could encourage increased public use and access, particularly in East Mesa.

Migration corridors for bighorn sheep will be affected by both vehicle access and utility corridors. While use on these is generally light, additional roads expand public use and could potentially isolate wildlife populations.

USE

With the Use Alternative providing only 22 percent of the public lands in Classes C and L, plus the 50 ACECs, wildlife habitat conditions could be expected to decline at a rate almost equal to the No Action Alternative. Only those species which occur in the higher montane areas proposed for wilderness, e.g., isolated bighorn sheep populations, would be unaffected. They, too, could be impacted in the long term, since herd intermingling and migration movement could be reduced by increased public use on bajadas between mountain ranges. Nine of the 13 officially listed species would suffer habitat deterioration.

Ninety-one percent of the desert tortoise habitat in the CDCA would receive impacts equal to, or in excess of, present levels.

Vehicle access would be on existing routes of travel over much of the CDCA and, since many areas are heavily roaded already, virtually all areas in the lowlands could receive significant impacts.

Additional utility corridors, including several unoccupied ones, will generally increase public access into previously lightly impacted areas.

Livestock grazing, while mitigated by the 200-pounds-per-acre requirement on ephemeral ranges, will not be as intensively managed as other alternatives, particularly in the areas used by sheep.

PROPOSED PLAN

The Proposed Plan will increase protection for wildlife species and habitats over the Balanced Alternative. Major differences are: more acreage in Classes C and L providing greater protection for wildlife; a more balanced and lower burro population than in any alternative, with substantial improvement likely for sensitive natural systems and wildlife species; and 23 ACECs more than in any alternative, with a significant increase in acreage.

Endangered, threatened and rare Federal and State-listed species are protected better than under any other alternative.

The degree of protection of all habitats in all ecosystems of all species is not as great as in the Protection Alternative, but listed rare and sensitive species are benefited. Utility corridors, except in a small part of East Mesa, will be limited to existing use zones with essentially no new access developed. Perennial livestock forage allocations will be approximately equal to the Protection Alternative.

The number of ACECs is increased by 23 over those proposed in the Draft Plan Alternatives and many of these are keyed to management of important wildlife habitat, such as that for the black toad and the flat-tailed horned lizard, so as to enhance habitat of these species and ensure their survival.

Vehicle access will be allowed with less regulation than under the Protection Alternative, and organized motorized vehicle events will be allowed to cross Class L -- a distinct difference from the Draft. Courses will be on established, approved routes of travel, and use at critical seasons can be effectively regulated or prohibited. Environmental assessment and mitigation will consider habitat and divert events away from particularly sensitive habitats. There will be no pits or start/finish areas in Class L. No additional adverse impacts are expected to occur.

The Proposed Plan increases the forage requirement on crucial desert tortoise habitat to 350 pounds per acre before turnout. The stipulations for grazing by domestic livestock, particularly for tortoise and bighorn sheep, increase the amount of protection and monitoring resulting in maintenance of wildlife habitat and numbers at levels over any of the Draft Plan Alternatives.

6. WILD HORSES AND BURROS

Basis of Impact Analysis

Impacts to wild horses and burros have been evaluated in terms of the effects of proposed management actions on the population level of animals.

Relationship Between Impacts and Issues

ISSUES	SIGNIFICANT IMPACTS
Vehicle Access & "ORV"	No
Wildlife Protection	Yes
Wilderness	No
ACECs	Yes
Mineral Exp. & Dev.	No
Energy & Utilities	No
Burros	Yes
Cultural Res. Protection	Yes
Livestock Grazing	Yes
Recreation	No

Summary of Proposed Plan Impacts

Inventory and analysis indicates that the present population level of burros on the Desert has reached a critical overgrazing point. Reduction of approximately 10,000 wild horses and burros under the Proposed Plan to 2,747 burros and 281 horses will have a positive impact, resulting in stable, healthy herds.

The greatest impact to wild horses and burros will occur from wildlife management. In all cases where major conflict existed between burros and wildlife, they were the result of poor ecological conditions. Decisions made in the Proposed Plan will result in positive impact to the ecological condition of the Desert and, thus, to the animals that remain. Cultural resource management has few adverse effects on burros. There were no impacts to burros associated with Wilderness.

Some ACEC management prescriptions in the Proposed Plan will also impact burros. In several ACECs it is a recommended that strong management action be taken in all areas where sensitive resource values would be adversely affected by burros.

Mining operations will have no impact on the management of burros in the Proposed Plan.

Since the majority of wild horses and burros exist in extremely rugged terrain and are not known to be affected by motorized vehicles, few impacts are anticipated from that use.

Proposed Plan action for livestock grazing will have a positive impact on wild horses and burros through new water developments and maintenance of existing facilities. Where there were conflicts between burros and domestic livestock, they were treated equally.

Energy utility development and general recreation are anticipated to have little effect on wild horse and burro populations.

Comparative Analysis of Impacts by Alternative

The Proposed Plan meets the needs of wild horse and burro herds based on the maintenance of a thriving balanced natural ecology. It will maintain lower burro populations than Draft Plan Alternatives, which propose lowering wild horse and burro populations from a 1979 estimated level of 8,788 burros and 746 horses. Comparable proposed population levels for the Draft Alternatives and this Proposed Plan are: 1) 8,788 burros and 746 horses under the No Action Alternative; 2) 3,820 burros and 356 horses under the Protection Alternative; 3) 3,602 burros and 331 horses under the Balanced Alternative; 4) 3,313 burros and 311 horses under the Use Alternative; and 5) 2,747 burros and 281 horses under the Proposed Plan. (Estimates of current horses and burro populations have been revised upward to over 11,000, based on field review as of June 1980.

Based upon vegetative condition, potential conflicts with critical sensitive resources, and maintenance of Desert ecosystems, the Proposed Plan would provide stable, manageable and healthy herd levels.

7. CULTURAL RESOURCES AND PALEONTOLOGICAL VALUES

Basis of Impact Analysis

The basis for analyzing impacts is the number of acres of public lands in the CDCA which contain known and predicted cultural and paleontologic resources, in relation to the various multiple-use class designations, and other special management designations, such as ACECs etc. For example, Classes C and L designation would have positive impact; Classes M and I, negative impact.

The potential for impact is evaluated in relation to the present condition and trend of the resource base (sites). Parameters of impact evaluation include: (1) Potential for yielding information on past peoples and life forms, and (2) the potential interpretive value of the resources.

Relationship Between Impacts and Issues

ISSUES	SIGNIFICANT IMPACTS
Vehicle Access & "ORV"	Yes
Wildlife Protection	No
Wilderness	Yes
ACECs	Yes
Mineral Exp. & Dev.	Yes
Energy & Utilities	Yes
Burros	Yes
Cultural Res. Protection	Yes
Livestock Grazing	Yes
Recreation	Yes

Summary of Proposed Plan Impacts

Cultural and paleontological resources represent unique, non-renewable resources subject to a wide range of impacts. The condition of these resources is continually deteriorating due to impacts originating with human activity. Even without direct human impact, prehistoric, historic, and paleontological sites suffer from damage by natural (geomorphic) processes, e.g., erosion and sedimentary deposition. Some erosional and depositional damage has been "enhanced" or accelerated through human action, e.g., overgrazing, and vehicle use on fragile soils. Under the Proposed Plan many adverse impacts on these resources will continue; however, the current trend of resource damage and deterioration due to human activity will improve. The positive effect of the Proposed Plan will vary somewhat among the specific dimensions of resource management and use which affect cultural and paleontological sites.

The greatest loss of cultural and paleontological resources occurs due to vandalism and surface-disturbing activities. Direct impacts will occur under the Proposed Plan from competitive recreational vehicle events, mining activities, off-road vehicle free play, and certain aspects of utility facility construction.

The rate of deterioration of known and predicted sites of cultural and paleontological sensitivity will decrease from the present trend as a result of upon proposed vehicle management. Recreational vehicle free-play (open areas) were evaluated in the context of known and predicted sensitive resources and were designated in areas of relatively low resource sensitivity. Motorized-vehicle access will be directed under the proposed action to reduce the proliferation of vehicle trails and ways and the associated risk to surface depositions of cultural resources.

A greater risk to both cultural and paleontological resources is often associated with the construction of new roads and the additional access provided in association with utility transmission facility construction. Few impacts of this sort are anticipated. All proposed corridors contain existing facilities and associated routes of access with the exception of certain sections of Corridor BB. Levels of indirect impact on these resources, i.e., vandalism associated with increased access, should be negligible.

Mining activities and their potential adverse impact on cultural and paleontological resources will be closely regulated. Regulations pertaining to the surface management of public lands (43 CFR 3809) provide guidelines for inventory, protection, and mitigation of impacts on sensitive natural and cultural resources in all instances of surface-disturbing activity. Under the Proposed Plan less than 1 percent of the lands in the CDCA will be affected by mining activity. In all cases, project-specific inventory and protection/mitigation measures will be applied.

Trends of deterioration due to domestic livestock and introduced fauna (i.e., wild horses and burros) will significantly improve under the Proposed Plan. The reduction of wild horse and burro populations will decrease the absolute rate of resource deterioration as well as erosional damage attributed to these populations of animals. Livestock allotments are also being reduced and redistributed to ensure that levels of grazing under the Proposed Plan are well below carrying capacity. These management actions will reduce cutting by soil erosion, damage concentrated around water sources (predominantly areas of high cultural resource sensitivity), and the modification of soils and surface site integrity.

Wildlife management procedures and recommendation of areas for wilderness designation will contribute to the protection of cultural and paleontological resources. Both actions directly address the reduction of consumptive land use and measures to ensure the integrity of the natural environmental context in which the resources occur. The potential adverse effect of wilderness designation on limiting opportunities for study through the limitation of vehicle access has been ameliorated through the provision of "wilderness access corridors."

All actions under the Proposed Plan will conform to Section 106 guidelines of the National historic Preservation Act (16 USC 470f) to insure the compliance of all actions with regulations for the protection of cultural resources and historic properties. Specific policies outlined in the draft Memorandum of Agreement (See Appendix VII) between BLM, the Office of Historic Preservation, and the California State Historic Preservation Officer provide strong management and protection guidelines.

Cultural and paleontologic resources have been deteriorating in the CDCA due to human and natural causes. The Proposed Plan will slow this trend through a combination of placing known and predicted cultural/resource values will be placed in Multiple-Use Classes C and L and in ACECs, and establishing procedural requirements which would ensure that undue adverse impacts will be avoided. In addition, existing laws and regulations for the protection of cultural and paleontological resources have been incorporated, by reference, into the Proposed Plan.

Direct and indirect impacts will result from a variety of sources: vandalism, theft, surface disturbance, and constraints placed on archaeologic investigation. The main source of direct impacts are burros, livestock, motorized vehicle use, mining, and utilities. Indirect impacts result from increased access. Impacts to archaeologic investigation would be due to restrictions associated with recommended wilderness designations.

Comparative Analysis of Impacts by Alternative

Adverse impacts to cultural resources vary in direct relationship to the opportunity for impact under each of the Alternatives. Known and predicted resources of high and very high sensitivity/significance are considered "at risk" of impact where they occur in Class M or I, or would otherwise be exposed to adversity. Management under Classes C and L allow greater levels of direct action to be taken to protect sensitive resource values and is considered a desirable tool for cultural and paleontological resource protection and management. A summary of very high and high cultural resource sensitivity/ significance in multiple-use classes by alternative follows:

Percentage of Known Areas of Very High
Cultural Resource Sensitivity
By Multiple Use Class

Alternative	C	L	M	I
No Action	0	45	45	3
Protection	44	49	2	0
Balanced	24	50	21	.5
Use	7	26	55	7
Proposed	23	51	21	1

Percentage of Known Areas of High
Cultural Resource Sensitivity
By Multiple Use Class

Alternative	C	L	M	I
No Action	0	48	49	3
Protection	37	53	3	1
Balanced	16	43	31	1
Use	5	1.6	59	10
Proposed	12	53	23	3

NB: Percentages do not total 100 because some sensitivity areas are in unclassified BLM-administered land.

By and large, the profile of potential impacts to paleontological resources parallels the comparative analysis of potential cultural resource impacts by Alternatives. In the case of both cultural and paleontological resources, the same types of risk and relative, although not absolute, levels of potential impact exist among the alternatives.

The Proposed Plan provides a significant increase of lands protected in Class L and C over the No Action and Use Alternatives. The Protection Alternative is slightly more protective then the Proposed Plan.

Many factors besides relative multiple-use class/resource location relationships affect the potential for impact to sensitive resources under the alternatives. A significant factor in analysis of potential impacts is the opportunity under each alternative for special management of cultural and paleontological resources.

Under the Draft Alternatives (Use, Balanced and Protection) 29 ACECs incorporated management for cultural resource values and one ACEC incorporated management for paleontological resources. Comparagle figures under the Proposed Plan are 47 and 4 ACECs, respectively. Additionaly in considering ACEC and special areas, the Proposed Plan incorporated consideration of public land around ACECs. The majority of recommended ACECs not accepted for the Proposed Plan fall within Multiple-Use Classes C and L, thus providing protection for cultural and paleontological values.

The potential threat to surface resources from the burro population is significantly lower in the Proposed Plan than under any of the Draft Alternatives.

In summary, the cumulative potential adverse effect on cultural and paleontological resources is greatest in the No Action Alternative, with decreasing levels of adverse impact in the Use, Balanced, Proposed, and Protection Alternatives, respectively. Although the Protection Alternative would have the most positive impact on these resource values by providing the lowest risk of impact in Classes M and I, the Proposed Plan will substantially decrease the rate of impact and deterioration in relation to current trends.

8. NATIVE AMERICAN VALUES

Basis of Impact Analysis

The basis for analyzing impacts is the number of acres of land containing known Native American values which would be exposed to risk of potential impact by actions under Class M or I, based on concerns identified by Native American groups.

Relationship Between Impacts and Issues

ISSUES	SIGNIFICANT IMPACTS
Vehicle Access & "ORV"	Yes
Wildlife Protection	Yes
Wilderness	Yes
ACECs	Yes
Mineral Exp & Dev	Yes
Energy & Utilities	Yes
Burros	Yes
Cultural Res. Protection	Yes
Livestock Grazing	Yes
Recreation	Yes

Summary of Proposed Plan Impacts

Proposed Plan action will affect both traditionally signficant natural and cultural resources of Native American value and the formal relationship between the BLM and reservation governments.

Impacts to Native American values from the Proposed Plan will affect not only physical resources but also, in some cases, adversely affect resources of spiritual value with little or no associated physical destruction.

Numerous specific activities can impact Native American values. Generally, where these value exists, any surface-disturbing impact can be predicted to have an adverse impact. Such activities may include mineral extraction, power generation and transmission, waste disposal, grazing and archaeological excavation. Some activities, such as light recreation or grazing use of sacred areas, may also be considered desecrating and destructive to aspects of spiritual, as well as material, value.

The net impact of allowable activities can only be accurately assessed by Native American elders and traditionalists. Categorically, however, several dimensions of impacts may be foreseen. Many public land areas of the California Desert continue to be employed for ongoing use by Native Americans. Many Desert resources are seasonally collected for both secular and religious use. Any deterioration of the resource base or restriction of current Native American access will be an impact.

Ritual and religious resources are subject to both physical destruction and desecration or sacrilege. While the former impact is empirically verifiable, the latter affects subjective spiritual values. Even where no physical on-site disturbance occurs, there may be an ideological "impact." These impacts are intangible and have been summarized based on available data.

Under the Proposed Plan a majority of identified Native American resource values would be protected through multiple-use class and special implementation guidelines. Only about 20 percent of identified sensitive resource values occur within Classes M and I. Several sensitive resource areas have been identified which will not be protected by the multiple-use class and will be treated as Special Management Area. The guidelines for their protection will be developed in conjunction with the appropriate traditional Native American and reservation governments. Impacts to reservation lands and traditional resource values resulting from major Federal actions during the planning horizon will be reduced through special EIS notification guidelines established for tribal governments in and adjacent to the CDCA (see Appendix VIII).

The Proposed Plan contains programmatic guidelines for the protection of Native American heritage values which were developed with Native American groups to enhance protection and management and reduce adverse effects. These guidelines specifically provide for the protection of sensitive site data and provide procedures for the systematic inclusion of traditional Native American concerns in Bureau actions. The net effect of the Proposed Plan on Native American values and adjacent reservation level management will be positive.

Comparative Analysis of Impacts by Alternative

The Proposed Plan offers the most flexible and extensive strategies for the management and protection of sensitive resources of Native American value. The primary difference between alternatives is the relative proportion of land under the protective class management of Classes C and L and the higher risk to sensitive resources in Classes M and I.

Adverse impacts to natural and cultural resources would continue under the No Action Alternative. The absence of programmatic resource management and regional analysis would contribute to a relatively high loss of sensitive resources. Management under the No Action Alternative does not provide a means of systematically identifying and managing sensitive Native American socio-cultural values. Many of these would be lost during the 20-year management period. The destruction of a majority of the resources can be predicted under this alternative.

The Protection Alternative would incorporate approximately 97 percent of identified sensitive resource values in Classes C or L. In many cases, these protective class guidelines would allow direct action to be taken to protect sensitive resources. This alternative offers the most favorable context for the preservation, protection and stabilization of natural and cultural resources of Native American value. Protective management of some lands adjacent to reservations would restrict development. Some problems may be anticipated under this alternative with sites of continuing religious use in areas where road closures are anticipated, i.e., Class C areas. The overall impact of this alternative to Native American values should be low to moderate. Despite some restricted site and group specific concerns, this set of guidelines is largely compatible with the Native American values identified in this document.

Under the Balanced Alternative approximately 79 percent of identified sensitive resource values would occur within Classes C or L. Although specific impact concerns vary among the Native American groups, many highly sensitive areas and site-specific resources could be protected under this Alternative through the class guidelines implemented in conjunction with regional management programs. Some areas of traditional heritage values and religious significance do not fall within protective land use classifications in the Balanced Alternative and would be subject to deterioration or loss without special management action. Management of public lands adjacent to reservation lands will require special management to avoid adverse effects on reservation lands.

Major potential impacts can be anticipated from relatively relaxed guidelines for recreational, grazing, mining, and utility activities permitted in Class M. Many of these impacts may be avoided by careful management, inventory and permitting guidelines. Such potential impacting activities would, in many cases, be allowed in Class M, but could be directed to specific sites where effects would be minimal.

Under the Use Alternative, the majority of known resources of Native American value would be exposed to adverse impacts and possible destruction within Classes M and I. Of the identified resources, 61 percent would fall within these two classes. The relatively high proportion of consumptive uses allowable under this alternative would be incompatible with every reservation development and land management program. In many cases, the mitigation of impacts to sensitive resources would be impossible. Motor vehicle and recreation activity will contribute to an increase in user density and vehicular traffic in areas currently utilized by Native Americans, or adjacent to lands which are of ongoing importance. This will result in the destruction and desecration of sites of religious importance. Proposed energy development and mineral extraction would cause surface disturbances and the destruction of sensitive religious sites.

The Proposed Plan falls between the Balanced and Protection Alternatives relative to the identified resources occurring within Classes C and L. However, additional direct protection of Native American values will be implemented in policy actions. Heritage and government coordination issues identified by the Native American community are directly addressed in the Proposed Plan. Several policy and program agreements have been developed specifically for the CDCA. ACEC designations have been employed to provide specific protection of identified resources in areas of Class M and I management. Thirteen ACECs in the Proposed Plan will be managed for the protection of Native American values. Only nine ACECs incorporated these resource values under the Draft Plan Alternatives. The proposed action should reduce adverse impacts on sensitive resources of Native American value and contribute to the increased protection of heritage values.

9. VISUAL RESOURCES

Basis of Impact Analysis

The basis for analyzing impacts to visual resources is the comparison of protection afforded by the multiple-use class guidelines and the protection recommended by visual resource management standards.

Relationship Between Impacts and Issues

ISSUES	SIGNIFICANT IMPACTS
Vehicle Access & "ORV"	Yes
Wildlife Protection	No
Wilderness	Yes
ACECs	No
Mineral Exp. & Dev.	Yes
Energy & Utilities	Yes
Burros	No
Cultural Res. Protection	No
Livestock Grazing	No
Recreation	No

Summary of Proposed Plan Impacts

Vehicle use and ORV activity will be greatly controlled in the Proposed Plan by limiting use in Class L to approved routes of travel and avoiding road designation in Class M. Vehicle use may result in degradation of visual quality in localized "open" area situations; however, desert-wide vehicle use as authorized in the Proposed Plan will have a beneficial impact on visual resources in the protection of scenic quality. The restrictions on development and access imposed with wilderness designation and interim managed management will also be highly beneficial in the protection of scenic quality.

Surface-disturbing activities associated with mineral exploration and development have potential for seriously degrading scenic quality. While the extent of actual development may be small, development has the potential to influence the overall landscape.

Development of the two previously undeveloped utility corridors will result in linear intrusions on the landscape. Impacts will be in the form of contrasting lines, changes in landform and the addition of structures in previously undisturbed areas.

Consideration of visual resources in environmental analysis as required by multiple-use class guidelines and compliance with the visual resources standards outlined in the guidelines will, in part, ameliorate these potential impacts. There is potential for degradation of visual quality on approximately two million acres of public land where visual resources standards outlined in the guidelines are lower than the recommended standards.

Comparative Analysis of Impacts by Alternative

The degree of protection for visual resources is directly related to the multiple-use class allocation in each alternative. In all alternatives, there are differences in standards for protection afforded by the guidelines and the recommended visual resources management standards. In some cases, due to other resource considerations, the protection may be greater than recommended by visual resources standards; in other cases, it may be less.

The following table outlines by alternative the percentage of the CDCA public lands which would be protected at standards greater than, less than, and commensurate with, the recommended visual resources standards. These public lands which will be protected to standards less than recommended are subject to environmental assessments and the application of mitigating measures.

Alternative	% Greater Than	% Less Than	% Commensurate With
No Action	31	26	43
Protection	38	1	61
Balanced	35	11	54
Use	21	32	47
Proposed	39	11	50

10. WILDERNESS

Basis of Impact Analysis

The primary basis for analyzing impacts is the number of acres of Wilderness Study Areas (WSAs) of the CDCA public lands being recommended as suitable for wilderness designation (Class C). Class C would have the highest positive impact on wilderness characteristics. A second basis is the number of acres in Class L where wilderness characteristics can be protected and many other activities can still take place which would not take place in Class C. Acres in Class M would permit some tradeoffs with wilderness while the tradeoffs in Class I would generally favor use.

Relationship Between Impacts and Issues

ISSUES	SIGNIFICANT IMPACTS
Vehicle Access & ORV	Yes
Wildlife Protection	No
Wilderness	No
ACECs	No
Mineral Exp. & Dev.	Yes
Energy & Utilities	Yes
Burros	No
Cultural Res. Protection	No
Livestock Grazing	No
Recreation	No

Summary of Proposed Plan Impacts

The wilderness characteristics that might be impacted include: naturalness, size, and the ability to provide outstanding opportunities for solitude or a primitive and unconfined type of recreation. Managed under the Multiple-Use Class C guidelines specified in the Proposed Plan, all of these values would be maintained.

Within the CDCA, WSAs encompass 5,670,000 acres of public lands. Of this total, roughly 37 percent (2,074,000 acres) is recommended in the Proposed Plan as suitable for wilderness designation. The majority of the remaining area has been designated as Class L, where wilderness values would be generally favored over other uses. The estimated percentage of WSA acreage falling within the more restrictive C and L Classes is roughly 90 percent. Over 17 percent of the entire public lands in the CDCA is recommended as suitable for wilderness.

Direct and indirect impacts result from motorized vehicle use, mineral exploration and development, livestock grazing and energy and utility development. However, the requirement in the Proposed Plan to prepare an Environmental Impact Statement or Environmental Assessment Report for uses potentially impacting to wilderness characteristics will significantly reduce the overall potential adverse environmental impacts of the Proposed Plan in all multiple-use classes.

Comparative Analysis of Impacts by Alternative

The Protection Alternative, with 92 percent of all WSA acreage recommended as suitable for wilderness designation would have an adverse impact on many other uses that conflict with wilderness. The Balanced Alternative does not reflect criteria relative to the public issues (these criteria are listed below); therefore, although the amount of lands proposed for designation is similar to that proposed in the Proposed Plan, the recommended areas are not always in the correct location based upon public review of the Draft. The Use Alternative acreage does not reflect the intense public support for wilderness in the CDCA. The Proposed Plan provides a proportion of wilderness that is located in areas that were identified as desirable by public review. It also reflects the complete re-evaluation of all WSAs based on the following criteria:

-- Selection of areas having the highest wilderness values

-- Inclusion of representative land forms

-- Inclusion of wilderness areas close to urban areas

-- Consideration of relationship to existing wilderness

-- Minimization conflicts with other resource activities where possible.

The table below summarizes the wilderness designation recommendations of each alternative.

Table V-B-1

ALTERNATIVE	Number of WSAs Recommended for Wilderness	Acreage In Recommended WSAs (in 000s)	Percent of Recommended WSA Acres To Total Acres	Percent of Recommended WSA Acres to Total WSA Acres
No Action	0	0	0	0
Protection	108	5,220	43	92
Balanced	39	1,880	15	32
Use	6	602	5	11
Proposed Plan	43	2,074	17	37

Relationship Between Impacts and Issues

ISSUES	SIGNIFICANT IMPACTS
Vehicle Access & "ORV"	No
Wildlife Protection	No
Wilderness	No
ACECs	Yes
Mineral Exp and Dev	No
Energy and Utilities	No
Burros	No
Cultural Res Protection	No
Livestock Grazing	No
Recreation	No

11. AREAS OF CRITICAL ENVIRONMENTAL CONCERN (ACEC)

Basis of Impact Analysis

The impact analysis for ACECs is based upon the protection provided to identified critical resource values with ACEC designation compared to the protection provided to those values through the multiple-use class guidelines, and in some cases, additional special area designation.

Summary of Proposed Plan Impacts

Due to the nature of the ACEC designation there will be no direct impacts of Proposed Plan actions other than that of ACEC designation on the resources identified for protection. Management proscriptions identify the actions necessary to protect resource value within each ACEC. These proscriptions override management guidelines for the area as outlined in the Multiple-Use Class guidelines.

ACEC designation will significantly benefit the resource values. Designation will provide the management focus and special guidelines necessary to achieve resource protection. Impact analysis of ACEC designation is discussed in more detail under each resource narrative. Actions such as motor vehicle restrictions, strict stipulations or total withdrawal from mining, reduction or elimination of burros and strict stipulations on all development will all benefit the identified resource values. Impacts to ACECs which are proposed, but not designated, are not anticipated to be significant. Forty-six such areas were not recommended because the necessary protection was provided by the recommended multiple--use class, either C or L. It was determined that some designation other than ACEC (i.e., Research Natural Area, Historic Landmark, Historic Trail) was more appropriate to the protection needs of eight of the proposals. Forty additional areas were not recommended because, on further evaluation, it was determined that their significance or importance was not sufficient to warrant the special management attention afforded by ACEC designation.

The Proposed Plan reflects the need for special management of more critical areas than does the ACEC proposed in the Draft Plan Alternatives; these needs come directly from the public review process and issue identification. The degree of management intensity would go beyond that provided for in the multiple-use class guidelines. Further, ACEC designation lends special emphasis for patrol, surveillance and monitoring.

Comparative Analysis of Impacts by Alternative

Of the 50 ACECs proposed in the Draft Plan Alternatives, 37 were brought forward into the Proposed Plan, and 36 new ones were added. Individual description of ACECs not brought forward are in Appendix IV, together with reasons for not designating them.

The designation of ACECs in the Proposed Plan will protect the greatest range of resource values and specific site locations of any of the Plan Alternatives. The flexibility for management and potential for effective resource management through ACECs is equivalent in the Protection, No Action, Balanced and Use Alternatives. The Proposed Plan includes a larger number of designated ACECs and provides direct management and protection through multiple-use class guidelines, for all nominated ACECs. The Proposed Plan will have the greatest positive effect on desertwide resources through use of the ACEC designation process.

The table below describes the multiple-use class designation of ACECs in each Draft Plan Alternative and Proposed Plan.

Table V-B-2

ACECs by Class and Alternative

Alternative	Multiple Use Classes: C	L	M	I	Unclassified	Total	Public Land Acreage (000)
No Action	0	0	0	0	0	0	0
Protection	21	26	2	0	1	50	320
Balanced	9	19	18	1	3	50	320
Use	2	12	25	7	4	50	320
Proposed	5*	31*	30*	6	1	73	574

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*Five ACECs fall into more than one class.

12. RECREATION

Basis of Impact Analysis

The quantitative basis for analysis of recreation is the total amount of land available for various recreation activities under each of the multiple-use class designations. The anticipated quality of these recreational experiences has been subjectively evaluated in relation to potentially conflicting use or constraints.

Relationship Between Impacts and Issues

ISSUES	SIGNIFICANT IMPACTS
Vehicle Access and "ORV"	Yes
Wildlife Protection	Yes
Wilderness	Yes
ACECs	Yes
Mineral Exp. & Dev.	Yes
Energy & Utilities	Yes
Burros	No
Cultural Res. Protection	Yes
Livestock Grazing	No
Recreation	Yes

Summary of Proposed Plan Impacts

The Proposed Plan has potential for impacting recreation in two ways: either an increase or a decrease of the individual's existing opportunity to participate in a particular recreation activity. The Proposed Plan could also either enhance or degrade the quality of experience the recreationist could expect while participating in his chosen activity.

The Proposed Plan was designed to achieve a balance between intensive consumptive uses and extensive non-consumptive uses. In so doing, tradeoffs made to provide adequate opportunities and assure quality experiences for one type of recreation pursuit may impinge upon the opportunities and experiences for another type. Due to the nature of recreational activities it would be impossible to develop a plan that is without some negative impacts on recreation. The overall impact of the Proposed Plan is beneficial to recreation because it minimizes impacts between recreation activities, while providing opportunities for quality experiences for all recreation activities, commensurate with demand and resource capabilities.

The treatment of vehicle access in the Proposed Plan will provide ample opportunities for a quality recreational experience for all forms of vehicular play. However, there will be a reduction in total free-play acreage and an increase in "closed" areas. The total acreage of motor vehicle play areas where competitive events have traditionally taken place will remain essentially the same. Opportunities for competitive events will be increased because events will be allowed, under certain conditions, to cross in Multiple-Use Classes L, and in Class M will not be restricted to a few relatively small areas. This will greatly enhance the competitive event experience by providing variety and challenge for the participant, without degradation of the recreation resource.

Opportunities for nonmotorized open space uses such as sand sailing, model airplane and rocket flying, and soaring would be increased with the designation of an additional dry lake bed for this purpose. The elimination of conflicts with motorized uses on the two dry lakes set aside for these activities will greatly enhance the nonmotorized experience.

The elimination of motor vehicle use in Multiple-Use Class C areas will assure opportunities for a quality wilderness recreation experience. Opportunities for vehicle use in these areas will be lost; however, since vehicle use in the recommended wilderness has been historically low, this impact is not considered significant.

Opportunities for "collecting" types of recreation, such as hunting and rockhounding, and for nature study and resource-oriented recreation such as hiking, birdwatching, sightseeing, photography and observing desert wildflower displays will be facilitated through the provision of good vehicle access throughout Multiple--Use Classes L, M, and I.

Recreation experiences for these activities may be degraded by vehicle use, especially in Multiple-Use Class I; however, since the majority of good and excellent hunting, rockhounding, wildflower and birdwatching areas are located in Multiple-Use Classes L and M, where vehicle use will be limited, this impact is not anticipated to be significant.

Wildlife protection measures in the Proposed Plan will positively affect recreation opportunities such as birdwatching, hunting, and nature study which are all dependent upon healthy wildlife populations.

Opportunities for wilderness recreation will be ensured by the recommendation of over 2 million acres of public land for wilderness designation. The criteria used in selecting proposed wilderness areas, i.e., representative landforms, proximity to urban centers, naturalness, etc., should assure a quality recreation experience. However, designation of wilderness would, in itself, adversely affect those recreation opportunities which are dependent upon motor vehicles for access. Approximately 25 percent of the good or excellent hunting and rockhounding areas are located in Multiple-Use Class C, where vehicle use is prohibited. Wilderness access corridors are provided in the Proposed Plan but rockhounding and hunting in wilderness areas could not accompany motor vehicle use.

The establishment of ACECs will provide protection for identified special resource values which will assure opportunities for quality experiences in nature study and resource-oriented activities which are compatible with management prescriptions. Vehicle restrictions imposed in many of the ACECs are not considered to be a significant impact on access desertwide (see Appendix IV for more detailed discussion).

Mineral exploration and development areas and utility corridors will provide additional vehicle access to previously inaccessible areas. This increased access can be construed as a benefit to many forms of recreation; however, the disruption of the natural environment by exploration and development will adversely affect nature study and resource-oriented activities in the localized areas.

Recreation opportunities and experiences will also be enhanced through the visitor services program. Increased environmental awareness, improved visitor safety and better compliance with visitor use regulations will all benefit the recreation experience.

An often overlooked indirect impact of recreation is the effect it has on the health of individuals, family structure, and the traditional freedoms valued in American society. From surveys, testimony and discussion at public meetings, seminars, workshops and hearings, and from personal interviews, it is clear that recreation use of the Desert has an extremely high value to the user.

Daily life in the Los Angeles Basin is difficult and stressful. Air pollution, noise, crowding, and the inhuman pace of the freeways are among the burdens of the urbanite. The social indicators of crime, drug use, suicide, divorce, and other social problems are clear evidence of the impacts of life in this area.

Those seeking relief from unrewarding jobs, a sense of disintegrating family ties, the general confinement of urban life and other pressures find in the Desert such satisfactions as reaffirming family binds, enjoying the camaraderie of friends, enjoying or studying nature, competing in formal or informal events, collecting rock specimens, roaming in the anticipation of discovery, or seeking the rare satisfaction of solitude.

The action of the Proposed Plan responds to widespread public concern about Desert recreation by attempting to maintain the Desert diversity of recreational opportunities, while reducing conflicts with minimum bureaucratic pressure.

Comparative Analysis of Impacts by Alternative

Impacts of the Proposed Plan and Draft Plan Alternatives vary relative to the multiple-use class allocation in each alternative. Recreation opportunities in the CDCA are highly dependent upon vehicular access.

The quality of recreation experience is dependent upon the area available for the activity in relation to demand, resource capability, and conflicting uses. The quality of experience varies by alternative, depending upon the activity in which one wishes to participate.

The Protection Alternative favors high quality wilderness and nature-study/resource-oriented recreation over other recreational pursuits. The Use Alternative provides for high quality vehicle-oriented recreation experiences at the expense of wilderness and nature-study/resource-oriented recreation. The Balanced Alternative was an attempt to strike a balance between the two extremes of the recreation spectrum by providing for both high quality vehicle oriented recreation and wilderness and nature-study/resource-oriented recreation. The Proposed Plan is also designed to achieve that balance. It reflects public input indicating that there was need for both more wilderness and more freedom for vehicle use and competitive events.

The following table compares the accessibility for recreation by Alternative relative to the acreage of good and excellent areas for each of the various opportunities.

Table V-B-3

Recreation Accessibility by Alternative

RECREATION OPPORTUNITIES	NO ACTION	PROTECTION	BALANCED	USE	PROPOSED ACTION
Natural/Cultural Recreation Opportunities Acres/% of total of Resource Base (000)[1]	3,108 (100)[3]	1,460 (47)	2,176 (70)	2,891 (93)	2,785 (90)
Acquisition Recreation Opportunities Acres/% total of Resource Base (000)[1]	2,974 (100)[3]	1,546 (52)	2,290 (77)	2,885 (97)	2,252 (76)
Open Space Recreation Opportunities[2]	1	4	2	0	2
Wilderness Recreation					
Acres/% of total BLM WSAs Recommended as Suitable (000)	000 (00)[3]	5,221 (92)	1,828 (32)	602 (11)	2,074 (36)
Vehicle Oriented Recreation Opportunities					
Acres (%) BLM available for ORV Free-play (000)	628 (100)[4]	93 (15%)	289 (46)	1,306 (208)	485 (77)
% Change in Current Status	-	-85	-54	+108	-23
Change in number of Free play areas	0	-8	-1	+6	-1

[1] Recreation opportunity figures reflect acreage/percent of total resource base for Natural/Cultural and acquisition activities located in MUC L, M, and I areas as vehicle access is provided. Access in MUC C areas would limit opportunities as access would be restricted to foot or horseback travel. Opportunities may also be limited in MUC I areas due to conflicts in recreation uses.

[2] Open space recreation opportunities reflect the number of dry lakes located on BLM administered lands designated exclusively for open space uses such as sand sailing, hang glider flying, gyrocopter flying, etc.

[3] Acreage and percent totals were derived from information supplied by recreation user groups in BLM inventories.

[4] Acreage and percent totals currently open for cross-country vehicle use under the ICMP.

13. MOTORIZED VEHICLE ACCESS

Basis of Impact Analysis

The basis of impact analysis is the relative accessibility by motorized vehicle to public lands in the CDCA.

Relationship Between Impacts and Issues

ISSUES	SIGNIFICANT IMPACTS
Vehicle Access & "ORV"	Yes
Wildlife Protection	Yes
Wilderness	Yes
ACECs	Yes
Mineral Exp. & Dev.	Yes
Energy & Utilities	Yes
Burros	No
Cultural Res. Protection	Yes
Livestock Grazing	Yes
Recreation	Yes

Summary of Proposed Plan Impacts

This analysis deals specifically with the accessibility to public lands. The analysis addresses access as distinct from recreational ORV activity. Vehicle access is a supporting activity for all California Desert uses. Under the Proposed Plan, vehicle access will be constrained by actions designed to protect identified resource values, yet enhanced by actions designed to facilitate resource utilization. In addition, motorized vehicle access is addressed as an issue itself and, as such, was analyzed not just as a part of either protection or development, but as a need for all Desert activity.

In the Proposed Plan, 81.4 percent of the public lands in the CDCA are accessible to varying degrees by motorized vehicle travel. Of that, 59 percent is limited, 36 percent is moderately limited, and 5 percent is unlimited.

The Proposed Plan will not significantly change the number of miles of accessible routes of travel roads, ways, trails and accessible routes in the Desert. These will essentially stabilize in terms of total mileage, but will probably shift somewhat from more constrained to less constrained areas. The Proposed Plan will prevent further proliferation of vehicle routes. Future access needs for public land enjoyment or resource use will be evaluated on a case-by-case basis and approved when appropriate. It is assumed that, upon Congressional designation a wilderness, vehicle access routes in Multiple-Use Class C will be closed, as will access routes in some ACECs under the management prescription. Unnecessary vehicle routes, and any vehicle route causing considerable adverse impact in Multiple-Use Class L and in many ACECs will be closed. Access needs for resource use in all multiple-use classes will be provided for, commensurate with class guidelines.

The Proposed Plan will curtail the current trend toward an increase in the number of routes of travel. The designation of new routes that are needed will be balanced by present routes that are closed.

The analysis of strictly recreational vehicle-oriented use, including free play in "open" areas and competitive events, and the impacts on that use, is covered under Recreation in this chapter.

Comparative Analysis of Impacts by Alternative

The difference in accessibility by motorized vehicle between plan alternatives is shown in the following table. This comparison shows, within each plan alternative, the percentage of the total area of public lands accessible, followed by the percentage of the accessible area that is limited, moderately limited or unlimited, for each alternative.

Compared to the existing situation, the Protection Alternative would significantly reduce accessibility in the CDCA. The Proposed Plan and Balanced Alternative would stabilize access at the present level with a projected moderate shift in vehicle route miles from contrained to less constrained areas. The Use and No Action Alternatives would result in a significant increase in the number and miles of routes of travel in the CDCA, representing a continuing increase in accessibility.

Table V-B-4

Motorized Vehicle Accessibility by Alternative

	No Action	Protection	Balanced	Use	Proposed
Public Lands Accessible (%)	95	66.4	84.2	94.4	81.4
% of above land available for:					
Limited Access	30	86	50	17	59
Moderately Limited Access	65	13	47	71	36
Unlimited Access	5	1	3	12	5

14. LIVESTOCK GRAZING

Basis of Impact Analysis

The basis for analysis of impacts on livestock grazing are: animal unit months (AUMs) allocated to livestock, range condition, acres of forage production, and the number of allotments with restrictions applied for wildlife and other resource needs.

Relationship Between Impacts and Issues

ISSUES	SIGNIFICANT IMPACTS
Vehicle Access & "ORV"	Yes
Wildlife Protection	Yes
Wilderness	No
ACECs	No
Mineral Exp. & Dev.	No
Energy & Utilities	No
Burros	Yes
Cultural Res. Protection	Yes
Livestock Grazing	Yes
Recreation	Yes

Summary of Proposed Plan Impacts

In the Proposed Plan, livestock grazing use on perennial rangelands would be reduced 25 percent from 99,362 AUMs to 74,707 AUMs. The impact of the 74,707 AUM allocation on the 63 livestock operators would be mixed. The allotment with a current Allotment Management Plan will receive a six percent initial increase. Nine operations will be reduced by a total of 51 percent, varying from 20 percent to 76 percent per allotment. This reduction reflects changes in forage type designation, which may appear more severe than actual animals reduced.

The remaining 25 operations with perennial forage components will remain at current use levels. Under the Proposed Plan, all operations can anticipate increased forage allocations during the next 20 years. After 20 years a potential 90 percent increase could be realized. Twenty-eight operators would be allocated forage annually based on the annual forage production on ephemeral and perennial/ephemeral ranges.

Thirty-one allotments contain significant grazing management restrictions to accommodate other resources. Seasons of use were adjusted on 21 allotments. Sheep grazing was restricted to one grazing pass in crucial desert tortoise habitat. A standing crop of 350 pounds of forage per acre was provided in crucial desert tortoise habitat on ephemeral ranges. There was a shift of 1,567 AUMs from livestock to deer and bighorn sheep. Livestock grazing was eliminated on portions of fifteen allotments containing important bighorn sheep habitat. Sheep bedding areas are to be designated to avoid resource damage, and riparian areas would be fenced or otherwise protected from livestock use. All the above actions reduced the forage and area available for livestock use.

Allocation of 6,200 AUMs of forage in 15 allotments, which have previously been grazed, but are not currently allotted, would reduce the direct impacts of the overall grazing reductions by about 20 to 25 percent when they were implemented.

Development of 61 wells, 58 springs, 29 catchments, 220 miles of pipelines, 153 water troughs and 327 miles of pasture fence would beneficially impact livestock by increasing forage areas with adequate water and reducing the distance between forage and water which would improve animal weight gains. This would also cause a more uniform use of rangeland than is presently possible.

Reducing perennial forage allocations on 26 allotments by 43,240 AUMs below total carrying capacity to allow improvement in plant vigor, to improve forage allocations, and to construct new range improvements would improve livestock grazing distribution, reduce grazing intensity and result in improved range conditions. Seventeen allotments in "good" condition would remain in "good" condition; 15 allotments in "fair" condition would improve to "good" condition; one allotment in "poor" condition would improve to "good" condition; and one allotment in "poor" condition would improve to "fair" condition within 20 years. Improved range condition would result in a forage production increase of about 21,100 AUMs (120,534 AUMs to 141,586 AUMs) within 20 years.

Proposed forage allocations for wild horses and burros would significantly reduce competition for forage and water on 14 allotments as well as improve the natural ecological balance. Forage consumption by wild horses and burros would be reduced from 59,124 to 9,537 AUMs to meet natural system, sensitive wildlife and cultural resource management objectives on grazing allotments. This reduction in wild horse and burro grazing reduces conflicts with livestock.

Off-road vehicle (ORV) use and Desert recreationists have an adverse impact on livestock and livestock range facilities as a result of harassment of animals and vandalizing wells, windmills and other range facilities. Impacts would be reduced slightly due to road approvals or closures and increased ranger patrols.

Comparative Analysis of Impacts by Alternative

The table below is a comparison of perennial and perennial/ephemeral allotments between the present, the four alternatives, and one sub-alternative, and the Proposed Plan. These comparisons show animal unit months (AUMs) authorized under each action, the projected range condition in 20 years, the potential livestock forage production within 20 years, and restrictions on grazing allotments to be imposed by each action. An allotment-by-allotment comparison of condition and forage production can be found on Table V-B-6, located at the end of this Livestock Grazing impact section.

Table V-B-5

Summary Comparison - Livestock Grazing

	Present	No Action	Protection	No Grazing	Balanced	Use	Proposed
Initial AUMs Authorized At Implementation	84,700	99,367	74,747	0	77,951	81,847	74,707
Range Condition Of Perennial & Perennial/Ephemeral Allotments	17G, 16F, 1P	13G, 13F, 8P	22G, 11F, 1P	5E, 27G, 2F	22G, 11F, 1P	22G, 11F, 1P	22G, 11F, 1P
Forage Production (AUM's)	120,534	97,065	142,182	162,560	142,182	142,182	141,586
Allotments With Grazing Restrictions	0	0	21	0	21	21	31

Initial AUMs Authorized. The number of AUMs allocated under the Grazing Decisions implementing the Plan.

Range Condition of Allotment. Projected range condition of the 34 perennial - perennial/ephemeral allotments within 20 years.

Allotments with Grazing Restrictions. Number of perennial and perennial/ephemeral allotments with special restrictions to protect other resource values.

Forage Production. Projected perennial livestock forage potentially available for livestock grazing within 20 years expressed in AUMs.

IMPACTS OF GRAZING MANAGEMENT

The preceding section summarized the impacts on livestock grazing from the Proposed Plan and a comparative analysis of impacts to livestock grazing from all alternatives. This section consolidates and summarizes the material related to impacts from grazing on all resources.

Primary concerns about grazing management are the impacts of grazing on wildlife (especially bighorn sheep and desert tortoise) and riparian habitat, desert vegetation, cultural resources, and what consequence changing present modes of grazing management will have on social and economic conditions. Important, but secondary, issues are grazing impacts on soil, burros, and wilderness.

WILDLIFE

The result of the proposed grazing management practices and forage allocations would be substantial relief from present livestock wildlife conflicts. Reduced stocking rates and minimum vegetation standing crop requirements would provide additional forage for wildlife in addition to the 1,567 AUMs directly allocated to deer and bighorn sheep. Adjusting sheep grazing to one pass over crucial desert tortoise habitat would reduce present levels of habitat conflict but would not eliminate tortoise and livestock competition.

Designation of sheep bedding grounds would avoid damage to wildlife habitat due to intensive vegetation removal and soil trampling. Eliminating or reducing the area and intensity of grazing on 15 allotments containing bighorn sheep habitat would improve habitat conditions and reduce competition for forage, water and space.

Though actions are proposed to reduce or eliminate livestock impacts on wildlife, some impacts would continue due to trampling, forage consumption and alteration of natural water sources. Range improvements would result in a net impact that is a significant reduction in the character and extent of adverse wildlife and livestock relationships and also would result in significant improvement of wildlife conditions compared to the present situation.

Bighorn Sheep

Fifteen grazing allotments provide habitat for 27 percent of the desert bighorn sheep of the CDCA. Livestock grazing would be subject to the following restrictions to consider bighorn habitat needs:

1) Livestock grazing would be eliminated from all bighorn habitat in the Last Chance, Hunter Mountain and Lacy Cactus allotments.
2) Bighorn sheep would be allocated 200 percent of their estimated forage needs where bighorn and livestock occur in the same allotments.
3) Grazing would be eliminated in the Lazy Daisy allotment in bighorn habitat and the allotment would be reduced in size and changed to an ephemeral class.
4) The East Mojave area (nine allotments, where bighorn sheep and livestock exist) management would be monitored and adjusted if needed to ensure stabilization of bighorn preparation.
5) Bighorn forage species would be used as key management species for adjusting grazing management.

Removal of livestock grazing from bighorn habitat in the Last Chance, Hunter Mountain, Lacy Cactus and Lazy Daisy allotments would eliminate livestock/bighorn conflicts on approximately 400,000 acres of bighorn habitat by eliminating competition for forage, water and space.

Allocation of 200 percent of bighorn forage for key species on nine allotments, and establishment of monitoring systems to detect changes in bighorn populations or habitat condition, would beneficially impact bighorn.

Modification of present grazing management practices to those prescribed in the Proposed Plan would substantially reduce livestock/bighorn conflicts. The risk of livestock grazing causing decline in bighorn populations or degradation of habitat conditions is significantly reduced. Of all desert bighorn habitat, 22 percent would still contain some degree of risk of interaction and impact. Ten percent of bighorn concentration areas would be potentially at risk to adverse livestock impacts while 90 percent would be without substantial risk. About 32 percent of permanent range, 19 percent of seasonal range and 20 percent of transient range would also be subject to the risk of livestock impacts, while 68 percent, 81 percent and 80 percent of those habitats would not be at risk. The result of proposed grazing management on bighorn sheep would be a substantial reduction of adverse impacts or risk of impact to bighorn sheep and their habitat.

Desert Tortoise

Grazing management prescriptions for highly crucial tortoise habitat, which is currently in good condition, would be effective in maintaining existing conditions and populations. Where habitat conditions are poor or declining, or where population densities are low, the grazing prescriptions will not result in habitat improvement or population increases. The poor or declining habitat areas may not have been a direct result of livestock grazing. A BLM-sponsored study is underway to determine the impact of livestock grazing on desert tortoise.

The risk of habitat or population decline in the Proposed Plan has been reduced significantly, but not eliminated.

Riparian Habitat

The condition of riparian habitat would improve substantially due to fencing. Increased cover, improved habitat diversity, and reduced levels of livestock-associated disturbance would benefit wildlife species associated with this habitat.

The net result would be increased wildlife species diversity and increased wildlife production, especially by non-game birds.

The Draft EIS indicated that Last Chance, Hunter Mountain, Lacy-McCloud-Cactus, Tanawee, Colton Hills, Kessler Springs, Lanfair Valley, Valley View, Valley Wells and Lazy Daisy allotments require further study to determine if additional grazing management adjustments would be required to better achieve wildlife objectives. The results of this analysis were incorporated into the Livestock Grazing Element of the Proposed Plan.

VEGETATION

Impacts to vegetation occur in four major categories: (1) rare, threatened or endangered species; (2) unique plant assemblages; (3) structure, composition, and cover; and (4) livestock forage characteristics (range condition, trend, and production).

Rare, Threatened or Endangered Plant Species

Thirty-one rare, threatened or endangered plant species occur in the grazing allotments, but little information is available about them. Therefore, impact predictions are speculative and monitoring would be required to determine the actual nature and extent of impacts.

Three rare plant species (*Astragalus lentiginosus* var. *sesquimetralis*, *Nitrophila mohavensis* and *Grindelia fraxino-prutensis*) occur only at seeps or springs in the CDCA. The entire population of each of these species occurs within the boundaries of the Last Chance allotment, the Death Valley Junction proposed allotment, and the Sand Spring and Chicago burro herd concentration areas. Due to the high level of livestock forage utilization and trampling which occurs around seeps and springs, a potential risk of impact to these three species exists.

Nine rare, threatened or endangered plant species may occur on some plains, fans, hillsides, dry washes, or canyon bottoms. Because their occurrence is in areas generally not conducive to livestock concentration, there is only a slight potential risk. On cliffs and rocky slopes where cattle cannot graze, 25 rare, threatened, or endangered plant species exist.

With the exception of the three plant species associated with springs and seeps where there is potential for risk, there is no strong evidence linking present or past declines in the populations or vigor of rare, threatened or endangered plants with livestock grazing.

Unique Plant Assemblages (UPAs)

All or part of 40 UPAs occur in 29 allotments, 12 in the Hunter Mountain, Cantil Common, Rudnick Common, Walker Pass, Cronese Lake, Lanfair Valley and Valley View allotments.

The Shadow Valley and Round Valley UPAs are subclimax communities maintained in their present state of grazing. The Proposed Plan would continue to maintain these assemblages. The Joshua Tree UPA would also be maintained by the Proposed Plan.

The Smugglers Cave Chaparral Assemblage would be slightly impacted. *Ceanothus opeggii*, a dominant chaparral species, would receive substantial utilization, but not enough to change the gross structure of the community.

The Mojave Saltbush Assemblage would be benefically impacted. Grazing use has been historically high; for example, 65,000 head grazed the area in 1954. Reduction of grazing to a maximum of 3,000 head would reduce vegetation removal by 300,000 tons of biomass per year when compared to the 1954 grazing levels. This significantly reduces vegetation community structural changes.

Creosote rings in the Johnson Valley/Lucerne Valley Assemblage would sustain adverse impacts from sheep grazing. Heavy utilization of succulent herbs at the base of the rings adversely affects the creosote rings. Positive impacts result by removal of sheep bedgrounds from the creosote rings consistent with the management prescription calling for designation of sheep bedgrounds in areas without significant resource conflicts.

Vegetation Communities

Grazing would modify plant species composition, cover and density wherever it occurs. Many of the vegetation communities of the Desert have developed, in part, as the result of years of grazing. Early records clearly indicate a decline in perennial bunch grasses, such as Indian rice grass and desert needle grass over the past 100 years.

Under the Proposed Plan, vegetation structure and composition would slowly change. Plant vigor of palatable species of perennial grasses would increase. Vegetation removal would be decreased by 20 million pounds annually on perennial ranges, due to livestock reductions. Therefore, the rate of modification of plant structure would be decreased while plant cover and biomass would increase over present levels. All change, however, would be most dependent upon the climatic pattern during the next 20 years.

RANGE CONDITION AND PRODUCTION

Livestock forage production would increase under the Proposed Plan, and range condition and trend would improve. Table V-B-6 details forage production estimates and projected range condition results for each allotment.

Improved production, condition and trend result from stocking livestock at rates well below carrying capacity and achieving better distribution of livestock due to range improvements. Allotments in "fair" condition would be stocked 50 percent below carrying capacity, allotments in "good" condition would be stocked up to 25 percent below carrying capacity, and the single allotment in "poor" condition would be stocked 70 percent below carrying capacity. The 301 water developments would improve livestock distribution and reduce the degree of concentration on present water sources. However, 150 acres would be highly disturbed during construction of the range improvements, resulting in an initial direct loss of 5 to 10 AUMs while providing hundreds of additional AUMs of grazing.

CULTURAL RESOURCES

Grazing causes breakage of surface artifacts, destruction of archaeological features, and loss of information in the context of occurrence through trampling and soil displacement. Development of water sources and installation of fences directly impacts cultural resources. Development of water sources has extremely high potential for adverse impacts because of the correlation of occurrence of archaeological sites near water, the site of greatest livestock concentration.

Overall, livestock grazing activities potentially impact cultural resources in all allotments, with a high risk on nine allotments, moderate risk on 24 allotments, and low risk on 21 allotments. Over 37,000 sites and 491 miles of historic roads and trails would be subject to potential impact. The Proposed Plan would affect 834 square miles of very high sensitive cultural resources within 35 existing grazing allotments and could affect 1048 square miles of highly sensitive cultural resources within 43 existing grazing allotments.

As with many other actions, there will be subsequent environmental analyses on any grazing management improvement to assess cultural resource impacts.

The impacts of livestock grazing on social and economic conditions are major issues and are analyzed elsewhere in this section.

SOILS

Grazing impacts soils directly through soil compaction and indirectly through reduced vegetative cover which can alter rates of erosion. Based on analysis of aerial photographs of 3.5 million out of the 5 million acres grazed, it was determined that watering sites, holding areas and trails resulted in high impacts to soils due to compaction. A total of 1,411 acres out of the total 5 million acres have had high impacts from past grazing. Watering sites and holding areas were responsible for impacts to 1,300 acres, and trails impacted about 111 acres.

Grazing under the Proposed Plan would reduce soil impacts caused by compaction through reduction of the number of animals concentrating on existing water sources and utilizing existing trails. Development of over 300 new water sources, while providing many benefits, would result in new or increased compaction rates on an estimated 150 acres. Soil compaction occurs less intensively throughout the grazing allotments, but will cause no impact on plant survival, plant establishment, or water infiltration.

Vegetative cover in the Desert is generally very low and plays no major role in controlling water erosion. Thus, the relatively slight reduction in vegetative cover would not impact the present rate of erosion. Livestock may benefically impact water infiltration rates on some soils by disrupting vesicular crusts. Cumulatively, the impacts of grazing on soils are not significant.

BURROS

Since domestic livestock and wild horses and burros compete for similar forage, forage allocations result in direct impacts. Development of 301 water resources also impacts wild horses and burros, as does the construction of fences. The impact of livestock grazing management in the Proposed Plan is slightly beneficial. Beneficial impacts result from the allocation of adequate forage to meet both livestock and wild horse and burro requirements where both exist. This was achieved by proportionally reducing livestock and burro grazing in areas of forage over-utilization. Development of additional water increases the availability and supply of water providing both adequate forage and water to meet burro requirements.

WILDERNESS

Grazing would continue at existing or reduced levels in all wilderness areas. No increases in forage are allocated to livestock. Development of range improvement or maintenance of existing facilities would be conducted within the guidelines required for preservation of wilderness values.

Since wilderness values were not degraded under previous grazing intensities, no adverse impacts to those values would result from the same, or reduced, levels of grazing.

Table V-B-6
Alternative Comparison of Livestock Grazing Impacts on Range Condition and Forage Production

Perennial Allotment	Condition[a]					Forage Production									
						Present		No Action		Protection Balanced Use		No Grazing		Proposed	
	Present	No Action	Protection Balanced Use	No Grazing	Proposed	Forage Production lbs/AC	Carrying Capacity AUM	Forage Production lbs/AC	Carrying Capacity AUM	Forage Procuction lbs/AC	Carrying Capacity AUM	Forage Production lbs/AC	Carrying Capacity AUM	Forage Procuction lbs/AC	Carrying Capacity AUM
Fish Lake Valley	G	G	G	G	G	64	96	64	96	64	96	70	106	64	96
Bar 99	G	G	G	G	G	86	1147	86	1147	91	1204	95	1262	91	1204
Deep Springs	F	F	F	G	G	32	1410	29	1269	38	1692	43	1904	38	1692
Last Change	F	F	F	G	G	42	4338	29	3470	53	7320	57	5856	53	5423
Oasis Ranch	G	G	G	G	G	57	1297	57	1297	60	1362	68	1556	60	1362
South Oasis	F	F	F	G	G	68	1062	48	904	82	1274	92	1434	82	1274
Darwin	F	P	G	G	G	89	659	45	330	111	824	120	890	111	824
Hunter Mtn.	F	P	G	G	G	71	4274	36	2818	89	5343	103	6197	89	5343
Lacey Cactus McCloud	F	P	G	G	G	53	22,444	35	14813	66	28055	82	34788	66	28,055
Olancha Common	G	G	G	G	G	84	1009	84	1009	92	1110	97	1160	92	1110
Tunawee Common	F	F	F	G	G	49	2335	49	2335	59	2802	66	3152	62	2919
Oak Creek	F	F	F	G	F	124	20	124	20	124	20	22	136	124	20
Rundnick Common	F	P	G	G	G	54	8291	32	4975	67	10364	78	12022	67	10,364
Warren	G	F	G	G	G	93	55	93	55	93	55	102	61	93	55
Walker Pass Common	F	P	G	G	G	51	4519	31	2711	66	5875	74	6553	66	5875
Pahrump Valley	F	F	F	F	F	38	471	38	471	38	471	44	542	38	471
Hansen Common	G	G	G	G	G	30	1196	27	1076	36	1435	38	1495	36	1435
Harper Lake	G	G	G	E	G	22	406	24	316	24	316	28	359	24	316
Valley Well	F	P	F	G	G	48	31	29	19	51	33	65	42	51	33
Newberry Ord	F	F	F	G	G	40	1031	44	1134	44	1134	54	1392	48	1237
Rattlesnake Canyon	G	G	G	G	G	42	1044	42	1044	45	1096	46	1148	45	1096
Whitewater Canyon	G	G	G	G	G	51	1392	51	1392	54	1462	56	1531	54	1462
Clark Mountain	F	F	F	G	G	30	2633	21	1843	36	3160	42	3686	37	3291
Colton Hills	G	F	G	G	G	27	3986	23	3388	29	4385	16	2392	29	4385
Cresent Peak	G	G	G	E	G	53	1704	53	1704	58	1874	66	2130	58	1874
Granite Mtn.	G	P	G	G	G	37	4145	19	2073	41	4560	56	6218	41	4560
Gold Valley	G	G	G	E	G	83	1314	83	1314	88	1445	104	1643	88	1445
Horsethief Springs	F	F	F	G	G	41	5626	41	5626	49	6751	55	7595	51	7033
Kessler Springs	G	G	G	E	G	41	10,334	39	9817	43	10851	51	12918	43	10,851
Lanfair Valley	G	G	G	E	G	46	15,853	41	14268	51	17438	58	19816	51	17,438
Round Valley	P	P	P	F	F	94	62	94	62	123	81	146	96	123	81
Valley View	G	F	G	G	G	33	9418	28	8005	36	10360	46	13185	36	10,360
Valley Wells	F	F	F	G	G	28	6681	25	6013	32	7683	39	9019	35	8351
Jean Lake	G	G	G	G	G	26	251	26	251	26	251	29	276	26	251
TOTAL:							120,534		97,065		142,182		162,560		141,586

The impacts of grazing on range condition and forage production, over 20 years, are shown in this table.

The pounds per acre column is strictly for comparison within the same allotment between alternative. Comparing the allotments to one another by the lbs/ac column will be very misleading, since lbs/ac were determined by taking estimated carrying capacity in pounds and dividing by total acres in allotment. Allotments have various amounts of unsuitable grazing range that was not considered in this exercise.

The Protection, Balanced, and Use Alternatives are combined in these tables because total forage allocations vary a maximum of 2 percent in the alternatives and no significant impact differences are identifiable. The forage allocations to wild houses and burros, livestock and wildlife are shown in the grazing plan elements. The AUM projections for each allotment and each alternative is based on the estimated change in carrying capacity.

[a] Legend:
E = Excellent
G = Good
F = Fair
P = Poor

15. MINERAL EXPLORATION AND DEVELOPMENT

Basis of Impact Analysis

The basis for analyzing impacts is the number of acres of land with mineral potential which would be affected by the restrictions of Multiple-Use Classes C and L.

Relationship Between Impacts and Issues

ISSUES	SIGNIFICANT IMPACTS
Vehicle Access & "ORV"	Yes
Wildlife Protection	Yes
Wilderness	Yes
ACECs	Yes
Mineral Exp. & Dev.	Yes
Energy & Utilities	No
Burros	No
Cultural Res. Protection	Yes
Livestock Grazing	No
Recreation	No

Summary of Proposed Plan Impacts

At present in the CDCA, 12 million acres of public lands are open to mineral entry under the 1872 Mining Laws. Another 6 million acres of State and private lands in the CDCA are open to mineral exploration and development under State law, making a total of about 18 million acres of lands available to mineral activities in the CDCA.

Mineral development, or actual mining, is confined to a small area, but has a high impact on the local area around the site of extraction. Aerial photo studies of the CDCA have shown that, as of 1979, a total of 34,000 acres of land (0.13 percent) has been disturbed by all mining activities which have ever occurred in the CDCA.

Based on calculations derived from official published statistics of mining activities in California (see Appendix XIV), it is anticipated that an additional 25,000 acres will be disturbed by mining in the CDCA from 1980 to 2000. Of this acreage, approximately 3,800 acres is expected to be reclaimed and restored. Mining activities, based on aerial photo compilation, are expected to be located 51 percent in the mountains and 49 percent in the valleys and bajadas. Of this total development, 64 percent is expected to occur on BLM-administered lands and 36 percent on private lands within the CDCA.

An overriding factor on the impact to mining exploration and development is the new regulations controlling surface management. These will place controls on mining based on total resource management regardless of which alternative is chosen.

A second overriding factor is that there must be a minerals evaluation of all wilderness areas, and Congress will analyze the mineral values along with the wilderness values of each area before coming to a final decision.

Also, based on past congressional decisions on wilderness, it is assumed that Congress will allow a 10-year grace period after wilderness designation for exploration and filing. If it takes 5 years for Congress to act, there remains a 15-year period for mineral exploration and development in CDCA recommended wilderness areas.

Until official designation occurs, the Wilderness Interim Management Policy is in effect. It recognizes "grandfathered" rights of mineral development in wilderness areas.

The factors above combine to have an impact on mining which is not directly attributable to the Plan under any alternative.

Motor vehicle access for exploration and development is a factor. In regard to mining development, the right of access to a mining claim is granted by the General Mining Law of 1872 (as amended). However, this right is subject to reasonable mitigation measures imposed under 43 CFR 3802 or 3809 via plan of operations approval or through a right-of-may grant procedure. This may cause some delays in starting mineral operations until environmental considerations of the road placement have been analyzed and implemented.

However, access to public lands open to mineral entry under the General Mining Law of 1872 is still guaranteed, subject to reasonable mitigation to prevent undue degradation of the public lands.

The following table depicts the impacts of the Proposed Plan on mining by relating multiple-use classes with the acres available for entry.

CDCA Mineral Potential

	Classes	Acres*	Percentage of Mineral Entry Lands
Locatables	C&L	4,002	70
	M&I	1,679	30
Leasables	C&L	3,303	51
	M&I	3,125	49
Saleables	C&L	1,068	51
	M&I	1,035	49

*Acres of identified mineral potential, in thousands.

Laws and regulations protecting wildlife also affect mineral exploration and development. Delays will certainly occur in approving plans of operations while wildlife concerns of ACECs and mitigation of habitat impacts are developed. In extreme cases, such as operations occurring in an identified critical habitat of Federal or State-listed species, a denial of a mining plan may be issued. It is anticipated that this will be a rare event as, with proper planning, design and reclamation, the impacts from access to critical habitat can be mitigated to an acceptable level of surface disturbance, and the area of critical habitat is very small compared to the total land area in the CDCA.

New regulations (43 CFR 3802 & 3809) have also placed locatable mineral operations under the protection provision for cultural resources. This will affect some mineral exploration activities as cultural resource inventories and approved mitigation plans must be placed in plans of operation before these operations can proceed. Section 106 compliance procedures for cultural resources and the regulations under 35 CFR 800 will also apply to mineral exploration activity.

Mining development will suffer delays in approval of plans of operation due to assuring compliance with these regulations; no long-term adverse impacts are foreseen.

The acquisition of State and railroad lands will have a slightly negative effect on mineral exploration activities. These landholders actively encourage mineral activities at the present time to generate resource revenues by leasing or royalty arrangements. Conveyance of these lands to BLM will place them under the appropriate multiple-use class guidelines and the Bureau's surface management regulations (43 CFR 3802 and 3809). The conveyance of Federal lands in an exchange is also expected to have a restrictive effect on exploration as the United States normally retains the mineral estate when title to the surface estate is transferred. At present, there are not any regulations that allow mining operations on private lands that have the locatable minerals reserved to the United States. The leaseable minerals are available on these lands under the authority of the Mineral Leasing Act of 1920.

A more accurate display of the impact of the Proposed Plan is given in the Comparative Analysis section below. It should be noted that Class C may be closed to non-grandfathered mineral activity upon Congressional designation, but, as mentioned above, a ten-year "grace" period in assumed to exist. Class L will limit the activities of the small miner due to the financial burdens imposed by the extensive mitigation requirements of Class L as compared to Classes M and I. For a more detailed analysis of the socioeconomic consequences of this alternative, the reader is referred to the socio economics part of this section.

Comparative Analysis of Impacts by Alternative

The principal differences between alternatives for minerals rests with the amount of acres available for development of locatable, leasable and saleable minerals under multiple-use classes, and acres where development would likely be restricted by environmental constraints to meet the multiple-use class requirements. The Protection Alternative has 92 percent of the public land Multiple-Use Classes L and C, which indicates the probability for significant restrictions for mineral development. The Balanced and Proposed Alternatives have assigned between 58 and 66 percent, respectively, of the public lands to Multiple-Use Classes C and L. The Use Alternative designated 23 percent in those classes and the No Action Alternative would have none.

Other constraints such as rare and endangered species, cultural resources, and water and air quality apply to all mineral development on all public lands, regardless of the multiple-use class involved.

Energy development will be similarly impacted by the Protection and Balanced Alternatives by having a higher percentage of the CDCA in the most restrictive multiple-use classes. In view of the continuing demand for energy, the actual difference between alternatives may be much smaller than expected from the difference in the amount of lands in Multiple-Use Classes C and L. The greatest differences will probably occur in the location of the facility rather than the number of facilities.

The long-term impacts of the Protection Alternative will be to limit and then cause a retrenchment of the mineral industry. The Balanced Alternative and Proposed Plan will affect the viability of mining in Classes C and L, but the overall effect will be moderate constraint. The Use and No Action Alternatives will not have a significant effect.

Energy development in the Protection Alternative will be greatly hampered, especially wind and geothermal power sources. The Balanced Alternative will be limiting to geothermal and wind developed. The Proposed Plan and the Use and No Action Alternatives will allow for adequate development of the CDCA for fossil fuel and alternate energy systems.

The following table provides a comparison of the availability of lands having mineral potential in each alternative. Generally, unless Congress dictates otherwise, Class C will be closed to non-grandfathered mineral activity and Class L will require heavy mitigation requirements compared to Classes M or I. The Socioeconomic section of this Environmental Consequences chapter describes other impacts related to this activity.

Table V - B - 7

CDCA Public Lands/Mineral Availability by Alternative

		LOCATABLES		LEASABLES		SALEABLES		ENERGY	
ALT.	Multiple Use Class & Acres [a]	Acres (000s) [b]	% Total [c]	Acres (000s) [b]	% Total [c]	Acres (000s) [b]	% Total [c]	Acres (000s) [b]	% Total [c]
NO ACT.	C 0	0	0.0	0	0.0	0	0.0	0	0.0
	L -4,406	1,851	42.0	1,551	35.2	250	4.7	1,760	39.9
	M&I-7,448	2,816	37.8	3,517	57.2	332	4.5	3,528	47.4
PROT.	C -5,221	2,358	45.7	1,741	33.3	105	2.0	1,907	36.5
	L -5,943	2,326	39.1	2,663	44.8	3,347	56.3	2,921	49.2
	M&I- 693	452	65.2	502	72.4	250	36.1	470	67.8
BAL.	C -1,828	767	42.0	394	21.6	17	0.9	453	24.8
	L -5,262	2,221	42.2	2,019	38.4	264	5.0	2,258	42.9
	M&I-4,745	1,810	38.1	2,552	53.8	195	4.1	2,612	55.0
USE	C - 602	150	24.9	87	14.5	14	2.3	89	14.8
	L -2,067	853	41.3	545	26.4	28	1.4	666	33.2
	M&I-9,158	3,783	41.3	4,057	44.3	476	5.2	4,446	48.5
PROP. PLAN	C -2,074	1,188	57.3	532	25.7	213	10.3	531	25.6
	L -5,944	2,982	50.2	2,908	36.2	899	15.1	2,154	36.2
	M&I-3,810	1,750	45.9	3,255	85.4	1,087	28.5	2,252	59.1

[a] BLM Administered lands

[b] Acres of identified mineral and energy potential in each class

[c] Percent of class that has mineral or energy potential

16. ENERGY AND UTILITIES

Basis of Impact Analysis

The basis for impact analysis was the potential of activities to affect energy production and delivery capacity and flexibility.

Relationship Between Impacts and Issues

ISSUES	SIGNIFICANT IMPACTS
Vehicle Access & "ORV"	No
Wildlife Protection	Yes
Wilderness	Yes
ACECs	Yes
Mineral Exp & Dev	No
Energy & Utilities	Yes
Burros	No
Cultural Res. Protection	No
Livestock Grazing	No
Recreation	No

Summary of Proposed Plan Impacts

The Proposed Plan provides opportunities for a full range of energy production and transmission facilities in the CDCA and would have an overall positive impact. A system of joint use (i.e., electric, water, gas, etc.) corridors would accommodate expected energy transmission needs by the year 2000. It is intended that by identifying corridors in the Proposed Plan subsequent planning, engineering and review time frames and expenses will be substantially reduced. Except in Class C areas, some types of energy production facilities are permitted in every class throughout the CDCA. Class L allows geothermal, wind, and solar developments; Classes M and I allow these, as well as coal and other fossil fuel plants. In addition to the planning corridors in the Proposed Plan, based on all existing industry plans, additional electrical transmission corridors which may be needed to meet future energy demands are provided for as contingency corridors and identified in Appendix XV.

Comparative Analysis of Impacts by Alternative

The main difference between alternatives is in the number and location of corridors, and the restrictions on development of power plant sites in Class L. The No Action Alternative contains 0 corridors; the Protection Alternative, 15; Balanced, 20; Use 28; and the Proposed Plan, 16. All alternatives are expected to accommodate the energy requirements predicted by the year 2000. The major difference is the amount of flexibility afforded by additional corridors and, in the case of the No Action Alternative, the additional time and expense involved in review of proposed projects where no corridors have been established.

Power plants were not permitted in Class L in the Draft. The effect of this restriction, when coupled with wilderness restrictions for Class C, is to limit potential power plant site opportunities on the public lands to 5.8 percent for the Protection Alternative, 39 percent for the Balanced Alternative, 75.5 percent for the Use Alternative, and 61.4 percent for the No Action Alternative. In comparison, 83 percent of the public lands are available for consideration in the Proposed Plan. It is difficult to determine the significance of these differences, however, since the number of future power plants in the CDCA has not been determined. For example, only one or two new coal-fired power plant sites have been estimated to be available by the year 2000. Existing sites approved by the State are available in private ownership.

In contrast, geothermal development is constrained by the location of suitable geothermal resource areas. Known Geothermal Resource Areas are available in all alternatives: 194,000 acres in No Action; 26,000 in Protection, 100,000 in Balanced, 194,000 in Use, and 118,720 acres in the Proposed Plan.

The technology for wind, solar, and other alternate energy sources is evolving. Several experimental projects are being incorporated in the Proposed Plan. Undoubtedly, the future will bring an increasing demand for such facilitaties in the CDCA, which has abundant solar and wind resources.

17. LAND TENURE ADJUSTMENT

Basis of Impact Analysis

The basis for analysis is the relative amounts of lands to be acquired by BLM and lands to be disposed of or transferred within the priorities emphasized in each alternative.

Relationship Between Impacts and Issues

ISSUES	SIGNIFICANT IMPACTS
Vehicle Access & "ORV"	Yes
Wildlife Protection	Yes
Wilderness	Yes
ACECs	Yes
Mineral Exp & Dev	Yes
Energy & Utilities	Yes
Burros	No
Cultural Res. Protection	Yes
Livestock Grazing	Yes
Recreation	Yes

Summary of Proposed Plan Impacts

The Proposed Plan provides a mechanism for resolving major public issues relating to land ownership and boundary patterns. The consequences of the way the Proposed Plan deals with the issues will all be positive: lands will be acquired, disposed of, or exchanged, consistent with the broad multiple use goals of the Plan. The result will be more efficient management of the public lands, coupled with fewer conflicts with other public and private land owners and more consistency and logic in desertwide land use patterns.

This analysis of land ownership vis-a-vis the issues is different than that for other resources. Land ownership is not a resource and is not impacted in the sense that resources are. Rather, land ownership, in the context of this EIS, is a process for resolving conflicts associated with land tenure. It would provide a flexible tool for improving BLM's management efficiency. Use of this tool in the Proposed Plan is directed at resolving major land ownership adjustments which are associated with the major public issues identified during the public review period.

Comparative Analysis of Impacts by Alternative

The Draft Alternatives deal with land tenure conflicts consistent with their objectives: The No Action Alternative contains no overall land tenure adjustment program; the Protection Alternative provides for the extensive acquisition of private and other lands consistent only with protection goals; the Balanced Alternative provides for a lower level of acquisition but does not relate directly to issues; the Use Alternative emphasizes the transfer and disposal of public lands but ignores protection needs; and the Proposed Plan provides for a combination of acquisition, transfer, and disposal consistent with multiple use goals and real issues. Both the Protection and Proposed Plans would ensure that public lands containing sensitive resource values such as wildlife, cultural resources, and minerals, would not be removed from Federal jurisdiction and management.

IMPACTS OF THE PROPOSED PLAN

SOCIOECONOMIC FACTORS

Basis of Impact Analysis

Economic impacts have been estimated in terms of changes in the level of economically significant activities and social impacts in the level of participation in certain lifestyles. The basis for comparison is the level and trends existing in 1979. Increased economic activity and undiminished participation in a lifestyle are considered beneficial impacts.

Relationship Between Impacts and Issues

ISSUE	SIGNIFICANT IMPACTS
Vehicle Access and "ORV"	Yes
Wildlife Protection	Yes
Wilderness	Yes
ACECs	Yes
Mineral Exp. & Dev.	Yes
Energy and Utilities	Yes
Burros	No
Cultural Res. Protection	No
Livestock Grazing	Yes
Recreation	Yes

Summary of Proposed Plan Impacts

At first glance it appears that wilderness decisions could have the greatest potential for adverse economic impacts on mineral exploration and development in the CDCA. However, in analyzing the Proposed Plan, it is assumed that Congressional wilderness designation will include a ten year "grace" period after the date of designation during which exploration may be conducted and new claims located. During that time stringent mitigation measures would be required in exploration plans to protect wilderness values. Complying with these measures would increase operating costs. Furthermore, the implementation of the Bureau's surface management regulations (43 CFR 3802 and 3809) is recognized as a part of the existing condition and trends. Costs associated with compliance with these regulations will be incurred regardless of which alternative is chosen, and therefore are not attributable to the Proposed Plan. It is assumed that all wilderness study areas now in effect in the CDCA would be lifted at the time Congress designates the wilderness areas proposed in this alternative. The majority of these will be designated Class L, where some constraints apply, but would remain be available to explore and develop.

The impact on the mineral industry of implementing the guidelines for Multiple-Use Classes L, M, and I would be slight, with most constraints resulting from the surface management regulations rather than the multiple-use classes. In Multiple-Use Class C, mineral exploration and development would be permitted for an estimated 15 years (five years until Congressional wilderness designation, then a ten year "grace period"). Even in the absence of Plan implementation these areas would have similar constraints resulting from wilderness study area management regulations (3802).

At the end of this fifteen year period no new mining activity would occur in wilderness areas, and existing valid claims would be developed with strict mitigation. The effect would be increased cost.

Another important factor is that minerals not yet discovered would not be developed. The impacts on the economy of the CDCA would not become apparent before the year 2000, which is the end of the time frame for the Proposed Plan. The monitoring and application of new technology for mineral exploration and development is important in view of this factor; a single major deposit not developed would mean, typically, foregoing a $100,000,000 investment and a total employment in the CDCA of from 200 to 1300 jobs.

The explicit recognition of protection required in Multiple-Use Classes C and L would tend to discourage independent miners from working in those areas. These people could divert their activity to Multiple-Use Classes M and I areas where they would be less regulated, but the potential disruption of their livelihood and lifestyle would be a real threat to them.

The designation of ACECs in the Proposed Plan would protect important natural values. However, it is important to recognize that development can take place on ACECs as long as it occurs without undue harm to natural values. Therefore, the ACECs will not be used as a "lock up" of land. Rather, the Proposed Plan anticipates concentrating on management and development, if appropriate, to protect and, more importantly, enhance natural values. While development may be more constrictive, and perhaps, costly, development in these areas will be planned and implemented more effectively.

Both the existing economic conditions and lifestyles of recreation users would be greatly enhanced by the Proposed Plan. This includes California Desert residents and visitors who use vehicles for recreation and those seeking non-vehicular recreation. Those who enjoy ORV activities may have to make slight adjustments in use areas, but the opportunities for competitive events will be enhanced. Livestyles, including wilderness experiences, hunting, nature study, and nonmotorized open space uses such as sand sailing will be enhanced due to complementary multiple-use class designations and decreased conflicts with motorized uses. Those enjoying rockhounding, hiking, and photography activities will find improved natural resource areas for these uses with minimal inconvenience due to limited vehicle use. Throughout the CDCA, a visitor services program will enhance the quality of recreation-oriented lifestyles for all Desert residents and visitors.

The result of this recreation use under the Proposed Plan will be a stabilization of the recreation vehicle market, with a good potential for growth depending on fuel costs and general economic factors.

The result will also be a continuation of and an opportunity for a wide variety of lifestyles associated with the wide variety of recreation use in the Desert. See the Recreation Element for more discussion of the impacts on lifestyle.

The impact of a 25 percent reduction in livestock forage authorized on perennial rangelands would be minimal for most of the operators using these allotments. For most, the effect would be somewhat offset because they would be authorized use of ephemeral forage as well. In addition, several of these operators are currently grazing less stock on their allotments than they are authorized. The overall effect would be primarily an increase in uncertainty about their forage supply each year because the Proposed Plan would increase their dependence upon annually authorized ephemeral forage use.

Elimination of livestock grazing on most of one operator's allotment would make his ranch inoperable as a cow-calf operation. On some good years, enough ephemeral forage use might be authorized on the remaining portion of the allotment to justify grazing some steers. This deletion of livestock grazing has been proposed to benefit bighorn sheep and desert tortoise habitat.

Livestock grazing restrictions to protect desert tortoise habitat have economic consequences. The 200 pound forage production threshold for sheep grazing would probably delay turnout dates by two weeks in most years. About 178,000 acres of cattle allotments would be affected by this restriction. In addition, sheep grazing on desert tortoise crucial habitat would be limited to one pass. In good forage years this would be a 66 percent use reduction, in poor years it would have no impact on sheep operators. About 128,000 acres of sheep allotments would be affected by this management practice.

Several new livestock allotments and allotment extensions are recommended in the Proposed Plan. The value of the perennial component which would be authorized is estimated to be about $320,000. The proposed new ephemeral allotments and extensions would increase the acreage of ephemeral allotments by 22 percent.

Except for the one case cited, the livelihoods and lifestyles of the livestock grazers in the CDCA would not be significantly adversely affected by the Proposed Plan. Some adjustments may be required, but the livestock-oriented way of life would not be threatened.

Three regions of the CDCA which are dominated by public lands have been selected by the California Energy Commission for the possible location of a coal-fired generating plant: Ivanpah Valley, Cadiz Valley, and Rice Valley. Of these, only Ivanpah Valley would not be available for such use under the Proposed Plan. Other areas may be considered and it appears that there will be sufficient private and public land available to accommodate this demand.

The number of utility corridors included in the Proposed Plan appears to be adequate to transmit the power from the likely power generation projects. There may be some reduction in reliability resulting from confinement to corridors, but this is unquantifiable at this time.

While military bases are a very important component of the socioeconomic health of the CDCA, existing facilities are not expected to be affected by the Proposed Plan. The extensive communication with the military during the planning process will continue during the Plan implementation process.

Comparative Analysis of Impacts by Alternative

In order of increasing restriction of economic development, the alternatives may be listed as follows: Use, No Action, Proposed, Balanced, Protection. The Use Alternative would actually encourage development by reducing some of the existing management constraints. The No Action Alternative, the existing situation, would permit continued growth in the economic uses of the public lands while following existing regulations and plans. The Proposed Plan and Balanced Alternative approximately, are equal in their effect on overall growth. However, the Proposed Plan is more realistic because it has considered the public input from the mining community and livestock operators. The Protection Alternative would be substantially more restrictive to economic growth than the others, primarily due to more wilderness designation. It is doubtful that any of the alternatives, other than the Protection Alternative, would cause the management of the public lands to be a limiting factor in the continued economic development of the CDCA.

Similarly, the lifestyles and livelihoods of Desert residents and visitors are not likely to be significantly affected by any of the alternatives other than possibly the Protection and Use Alternatives. Under either of these two, however, the lifestyles of one type of user would be sacrificed or diminished by the enhancement of another type. Although the Proposed Plan may require some shifting in paces and intensities of use, overall benefits from improved management of the public lands would more than outweigh the temporary inconvenience caused by this shift.

C. Unavoidable Impacts – Irreversible Commitment of Resources – Short Term Uses vs. Long Term Productivity

The Draft Plan Alternatives document included a section in the Draft Environmental Impact Statement which discussed the broad impacts, commitments, and consequences of the four Draft Plan Alternatives. That will not be repeated here, but may be referred to by the reader for background information if desired. This section will deal with these broad environmental impact concepts as they relate to the Proposed Plan.

ADVERSE IMPACTS WHICH CANNOT BE AVOIDED

AIR QUALITY

Continued movement of pollutants into the Desert from the coastal basins cannot be avoided. In addition, dust will result from vehicle "open" areas, and long existing and approved routes of travel. Strict enforcement of State air quality standards will limit but not eliminate increases in pollutants from energy and industrial sources in the desert.

WATER

Assuming full compliance with State water quality regulations, the only unavoidable impact will be the long-term overdrafting of ground water basins in the Desert from consumptive municipal, industrial, and agricutural users. This could impact ground water located under public lands.

SOIL

Vehicle play "open" areas, new roads, intensive mining and industrial sites, and intensive recreational use areas will result in soil compaction and disturbance. This could affect less than 5 percent of the public land in the Desert.

VEGETATION

Localized areas of intensive soil impact would also receive major impacts to vegetation, including complete removal or changes in species compostion as new plants invade disturbed soils.

WILDLIFE

Wildlife habitat and individual animals would be lost in some areas due to the impacts described above. In addition, individual animals will be lost wherever they are directly impacted by vehicles using routes of travel. Grazing, mining, and generally higher levels of consumptive use in Classes M and I will not necessarily cause adverse impacts on wildlife, but will probably keep wildlife habitat and populations from reaching maximized, ideal levels. Changes made as a result of the public reveiw of the Draft Plan in connection with the Protection Alternative would eliminate significant adverse impacts. Many of these, such as full protection of listed species, are incorporated in the Proposed Plan.

VISUAL QUALITY

One new utility corridor could, if used, affect visual quality somewhat. Stipulations to limit impacts of development on the public lands are intended to prevent unavoidable impacts which would degrade visual quality in the CDCA from existing conditions.

CULTURAL RESOURCES

Operation under agreements for the protection of cultural and historical resources should significantly reduce adverse impacts to cultural and paleontological resources. Inadvertent losses will occur in vehicle "open" areas, and in some high use areas such as around waterholes from livestock, wild horses and burros and large ungulates. Some materials of scientific value will be lost because natural processes destroy them before they can be locate and protected or salvaged.

NATIVE AMERICAN VALUES

Management cooperation with Native American groups under the signed memorandum of understanding and agreement will probably avoid most impacts. Certain Native American values are such that they may receive inadvertent adverse impacts. This is simply a function of the extent of public use of the public lands in the Desert, combined with the sensitivity and essential privacy of some of these values.

WILDERNESS

Wilderness values wherever inventoried will be protected under interim management until Congress acts to release areas recommended as nonsuitable. When that occurs, uses may take place which will change the wilderness character of those areas. Many of the sensitive natural values of these areas will continue to be protected by Multiple-Use Class L guidelines, ACEC management prescriptions, and similar support management.

RECREATION

The major recreational opportunity that will be adversely impacted will be the opportunity to drive cross country, off routes of travel, in motorized vehicles. This will be a reduction of about 20 percent in the area available currently.

GRAZING

The reduction in forage allocation will temporarily reduce the numbers of livestock using perennial forage by 25 percent. This would increase when new allotments were authorized and as range condition respond beyond existing authorization.

WILD HORSES AND BURROS

Individual animals would be removed from the public lands and their wild and free roaming status. This would result in improved conditions in the Desert's ecological balance and better health of herds and individual animals on the public land.

MINERALS AND ENERGY

Locations for utility corridors and power plant sites would be limited and constrained to protect sensitive natural resources. They would be adequate to meet projected needs. Mineral development would be similarly constrained and subject to regulation and stipulations to protect sensitive natural values. Depending upon the nature and speed of Congressional wilderness decisions, some potential mineral development in Class C areas could be foregone.

SOCIOECONOMICS

In the short-term, there will be unavoidable adverse effects on the grazing industry in the Desert. Economic impacts on mineral development will increase the cost of mineral production in some areas.

IRREVERSIBLE AND IRRETRIEVABLE COMMITMENTS OF RESOURCES

The Proposed Plan makes few irreversible or irretrievable resource commitments.

Mineral exploration and development would result in extraction of minerals which would be both irreversible and irretrievable.

Air and water quality degradation and soil loss due to mining, ORVs, grazing and power plant and transmission line construction would be irretrievable but would be reversible and would generally be short term.

Impacts to cultural resources and Native American traditional areas action would be both irreversible and irretrievable.

All other significant impacts would be considered reversible and retrievable. The Proposed Plan includes extensive monitoring proposals to measure impacts and adjust management and avoids, as much as possible, commitment of resources which cannot be modified based on changing public demands and observed resource response to management.

RELATIONSHIPS BETWEEN SHORT-TERM USES AND OF MAN'S ENVIRONMENT AND THE MAINTENANCE AND ENHANCEMENT OF LONG-TERM PRODUCTIVITY

The Proposed Plan does not limit future resource management options by permitting short-term uses which significantly decrease long-term productivity. Potentially destructive short-term uses of the environment are constrained by multiple use and sustained yield to ensure maintenance and enhancement of long-term productivity. Expansion of mining activities is allowed but under permit and after environmental assessment. Motorized vehicle use is controlled through route of travel designations and establishment of specific "open" areas where vehicular free play is allowed in areas where additional adverse environmental impacts are minimized. Grazing use is constrained and reduced by 25 percent on perennial ranges and limited to established ceilings on ephemeral range. Burros are managed to provide optimum habitat in key burro habitat areas and eliminated or reduced in herd management areas of poor suitability and resource conflict. The number of powerline corridors is set at 16, with consideration given to conventional electricity, generating facilities, as well as solar, wind and geothermal power sources.

Under the Proposed Plan short-term uses would generally enhance long-term productivity compared to present management.

Response to Public Comments

VI

ON DRAFT PLAN ALTERNATIVES AND
DRAFT EIS

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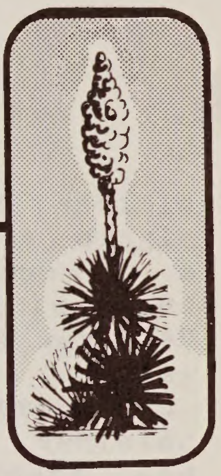

A. RESPONSE TO GENERAL PUBLIC 91

B. RESPONSE TO GOVERNMENTAL AGENCIES (Federal, State, and Local) 102

The public review of the Draft Plan Alternatives and EIS document provided a large response and resulted in the identification of major issues which formed the environmental assessment process. Public comment on each of the major issues is summarized below, followed by statements describing how the Final EIS and Proposed Plan addresses these issues. Part A addresses the issues raised by the general public. Section B, Response to Governmental Agencies, dicusses the specific concerns of Federal, State, and local agencies. The full summary of general public comment is included in Appendiz I.

A. Response to General Public

1. MOTORIZED VEHICLE ACCESS

Summary of Comment

Most of the responses received contained some comments on this controversial issue. Polarization of viewpoint was evident in characterizations of this issue as "elitists vs. desert users" or "general public vs. vocal special interests." Often couched in terms of emotional invective, serious concerns were expressed about environmental degradation and the continuation of traditional lifestyles and recreational activities.

The recreational aspect of the issue generated most of the comment. Those favoring more control of motorized vehicle access cite the proliferation of roads in the CDCA; growing evidence of damage to soils, wildlife, desert vegetation and cultural resource sites; the consumption of scarce gasoline supplies; and, the suppression and displacement of other non-motorized forms of recreation, which are increasing in popularity. Scientific articles detailing various forms of ecological destruction were among these comments.

These viewpoints are countered by people who dispute claims of vehicle damage to the environment, or charge that the value of what may be disturbed is trivial in comparison to the benefits of family recreation derived from free pursuit of play experiences. Several commenters claimed that recreation in the Desert is impossible without a vehicle and that those who wanted vehicle restrictions were "elitists" who wanted the Desert locked up.

Some commenters asked that vehicle users not be characterized as a single group - "ORV users" - but rather as a range of users with diverse vehicle types and purposes. The term "off-road vehicle" was disliked by many vehicle users; "off-highway" or "on-way" were preferred, implying that drivers of these vehicles did not leave established roads and trails.

The "existing roads and ways" and "open" area vehicle management concepts were debated. Several reviewers suggested that such zoning was an abdication of management responsibility by BLM, that "existing roads and way" areas were de facto open areas in which severe environmental degradation had occurred and would continue to occur. Also, they argued "open" areas were illegal by Presidential Executive Order. Only roads designated for use should be allowed vehicle traffic, and this designation should occur much faster than the seven years proposed in the Draft Plan Alternatives. Also, vehicles should be expressly forbidden from environmentally sensitive playas, sand deposits, and washes.

Countering this viewpoint were those who felt that the existing roads and ways concept was the only fair approach to vehicle management in the Desert, and that existing roads and ways should be defined as they were in the Interim Critical Management Plan (ICMP), as amended, not as in the draft Motorized Vehicle Element. Many argued that road closures should occur only in areas immediately adjacent to rare or very sensitive resources. They claimed the justification of such a vehicle policy is not only that the climate and size of the Desert demands it, but also that arbitrary zoning of the Desert has resulted in over concentration of use in some areas. This congestion has produced damage which would not occur if use were allowed to disperse naturally over the Desert terrain.

Proposed Plan Response

The following changes have been made to the Proposed Plan in response to the public's concerns regarding motorized vehicle use on the Desert.

1. "ORV" - This term has been dropped from use in the Proposed Plan because of the misunderstanding and confusion caused by imprecise use in the draft document. The distinction is made between (a) travel on routes of travel, and (b) travel off routes of travel permitted only within designated "open" areas. Most vehicle use, regardless of vehicle type (motorcycle, dunebuggy, four-wheel-drive, passenger car), takes place on routes of travel in the Desert.

2. Existing Roads and Ways - The definition of "existing roads and ways" has been changed to "existing routes of travel" and will include a complete set of maps which will identify existing routes. These maps will be available to the public after adoption of the Plan.

3. Competitive Events - Class guidelines have been changed to permit organized competitive events to pass through Class L under special conditions spelled out with specific criteria. This change, along with the change permitting start and finish areas in Class M, provide greater flexibility in the management of events. Under provisions in the Draft, start and finish areas were restricted to Class I open areas.

4. Motorized Vehicle Open Areas - A reevaluation of 33 potential "open" areas for motorized vehicle use was undertaken to find suitable sites for unrestricted free-play. Consideration was given to user preference with regard to terrain and proximity to urban centers, as well as capacity of the resources to sustain this type of activity. The "open" areas in the Proposed Plan are the result of this assessment. The Bureau is assuming a commitment to actively manage these areas for the benefit of the motorized vehicle recreationist and protection of adjacent public land.

5. General Access - Access for uses and activities other than recreation is given greater consideration in the Proposed Plan. Other important desert uses requiring motorized vehicle access include livestock grazing and mining. One of the most important factors in mineral exploration is access for drill rigs and test equipment.

6. More Education - A strong emphasis is being placed on educating the public on the values and sensitivities of the Desert and to increase the level of "desert awareness." The programs are outlined in the Recreation Element Plan. Funding for this important activity is itemized in the Proposed Plan implementation budget.

2. WILDLIFE

Summary of Comment

Indirectly, this topic may have been the most discussed of all public comment. The quality of wildlife habitat was a benchmark against which many commenters discussed the various activities presented in the draft. Whether wildlife was being over-protected or under-protected by Draft Plan Alternatives was the main subject of debate.

Several letters supported the Protection Alternative Wildlife Element because of its perceived strong protection of wildlife values; however, a number of responses cited statements from the Environmental Impact Statement to attack the Protection Alternative as inadequate in a number of aspects of wildlife protection.

These commenters recommended stronger provisions to restrict grazing, wild horse and burro numbers, and off-road vehicle use in the habitats of both State and federally listed species; rare, threatened, or endangered species; and sensitive and significant species habitats. Threats to riparian habitats, the desert tortoise, bighorn sheep, fish and amphibian species, and raptors were mentioned most frequently. "Endangered" or "threatened" listings were proposed for the desert tortoise in some letters. Several commenters lauded the EIS wildlife impact analysis which listed negative impacts for all four Draft Alternatives because all were demonstrated to permit decline in habitat quality. Several called for an improved Protection Alternative which avoided a "piecemeal management approach of accommodating consumptive uses where they occur," and the adoption of a resource value-oriented ecosystem-conscious management philosophy instead.

To others, the alternatives appear to be overly weighted towards the protection of wildlife values. BLM's "worst-case" wildlife analysis appears to confirm this imbalance of treatment in view of these letters and statements. Such an approach would be expensive and overly extend staff resources so that little wildlife protection would occur in the Protection or Balanced Alternative. A more selective approach is urged. Other commenters discussed the value of wildlife species and various philosophies of management. A few commenters felt that artificial maintenance of wildlife habitat violated the natural operation of ecosystem stability and environmental system. Others felt that the wildlife management philosophy lacked a practical perspective; that not all wildlife species were equally worthy of protection. To this end, a cost-beneficial analysis of this resource was urged to remove decisions from subjective criteria.

Other subjects of concern: the reintroduction of extirpated native species, particularly pronghorn antelope; predator control in relation to bighorn sheep protection and jackrabbit over-proliferation; introduction of desert exotics, such as the camel; the allowance of active wildlife management in Classes M and I; the validity of methodology used to discover conflicts between tortoise and livestock; provisions to develop water for wildlife; and management by other agencies, especially Fish and Wildlife and the National Park Service.

Proposed Plan Response

1. Burros - Provisions have been made to remove burros from critical wildlife habitat.

2. Riparian Areas - The Proposed Plan includes actions to protect important riparian areas from livestock grazing.

3. Bighorn Sheep - Measures are proposed in the Livestock Grazing Element to reduce and/or eliminate conflicts between cattle and bighorn sheep.

4. Desert Tortoise - Measures are proposed in the Livestock Grazing Element to reduce conflict between sheep grazing and desert tortoise habitat.

5. Multiple-Use Class - The Proposed Plan extends the Multiple-Use Class L, where necessary, to protect sensitive wildlife habitat. Consideration has been given to ecological units as defined by wildlife specialists in the determination of multiple-use class boundaries.

6. ACECs - The Proposed Plan increases the number of ACECs and Habitat Management Plans (HMPs) in Class M to further protect wildlife habitat.

3. WILDERNESS

Summary of Comment

Most people commenting on alternative CDCA wilderness proposals generally approved of the concept, but displayed widely varying opinions on how extensive a wilderness system is desirable in the desert.

The CDCA Wilderness Inventory completed in March, 1979, was the source of some criticism. Several letters recommended the inclusion of the Cadiz Valley - Iron Mountain area. A number of letters also urged the separation of the Wilderness Study and Reporting phases from the construction of alternatives, claiming that the consideration of wilderness values was being rushed and confused with less essential priorities.

Some comments denounced the use of the 1964 Wilderness Act criteria which, in the view of some, had been developed for non-desert areas, and which were inappropriate to the special qualities of the Desert. The contention that many WSAs contained roads by users' standards was another concern. Proponents of an extensive wilderness system urged the inclusion of a wide variety of desert land forms and ecosystems, a variety which some said was lacking in the Balanced Alternative.

The attendant benefits which wilderness designation would provide in terms of quality and ecosystem vitality was often cited as a justification for an extensive wilderness system, although some commentators expressed reservations about whether Class C provisions for livestock grazing, wild horse and burro control, and ORV access were stringent enough.

Other values of maximum wilderness designation: greatly increasing demand for primitive recreation ("witness the overcrowding in national parks", the economic concept of irreversibility favors wilderness designation to reduce opportunity costs, and the value of preserved genetic pools and urban escape sanctuaries will far outweigh short-term benefits of economic exploitation of the resources.

Advocates of a conservative approach to wilderness designation often denounced what they saw as an "elitist" attitude favoring access only for young, able-bodied people without families. They also argued that the harsh quality of the Desert would essentially lock these areas away forever, with little benefit to the public. Wilderness designation, in the view of some, may even be detrimental to some goals of preservation such as water development for wildlife. The values of known mineral and energy resources and social benefits to recreationists far outweigh the value of preserving habitat for species whose survival may have trivial value for humans. The Desert has a natural defense against extensive intrusions. The encroachment by people in vehicles may have reached its peak with the current and probably irrevocable gas shortage. "Natural" wilderness designation supplied by desert terrain and climate, rather than arbitrarily imposed administrative designations, is recommended by some.

Middle-ground wilderness advocates recommend a variety of selection criteria: proximity to urban areas; a variety of terrain types; and "outstanding" wilderness rating.

Many reviewers recommended an explanation of the wilderness ranking criteria in the Wilderness Element and the rationale for recommendations of the various alternative configurations. This was considered a serious lack, as was the omission of a WSA-by-WSA description of values and impacts by various draft alternatives in the EIS. The importance of precise boundary delineations and township and range descriptions of these areas was also roled: favor wilderness Protection Alternative.

Proposed Plan Response

1. Reevaluate WSAs - Recognizing the high degree of public concern over the issue "how much wilderness is needed or justified?," staff has reevaluated all 137 Wilderness Study Areas (WSAs) in detail. This assessment included a determination of those values that enhance wilderness quality (e.g., scenic quality, unique plant assemblages, etc.) and those activities and potential uses that compete (e.g., mineral development and motorized recreation). This information base provided a foundation for management decisions recommending suitable or nonsuitable for designation as wilderness.

2. Decision Criteria - Based on public comment, criteria for determining wilderness suitability was expanded to include: (a) proximity to urban areas - useability of these areas is an important consideration, (b) wilderness ranking - the best wilderness areas should be given special consideration, (c) land form - areas other than mountainous terrain should be factored into the desertwide wilderness system, and (d) areas adjacent to existing wilderness.

3. Wilderness Treated Separately - It was decided that the wilderness program should not be separated from the Plan, as suggested by a number of respondents. Wilderness is an integral part of the comprehensive plan and must be given full consideration along with other components in evaluation of alternatives and selection of a final plan.

4, Detailed Maps - A set of detailed USGS maps delineating all proposed wilderness areas is available for review by the public at the California Desert District Office in Riverside, formerly the Riverside BLM District Office.

5. Documentation - A thorough discussion of the background and decision process on all 137 WSAs is included in the appendix.

4. AREAS OF CRITICAL ENVIRONMENTAL CONCERN (ACEC)

Summary of Comment

Many letters and statements on this topic disputed BLM's application of the congressionally mandated "Area of Critical Environmental Concern" concept. Management was accused of defying the intent of the legislation both by a too liberal and a too conservative interpretation of ACEC criteria.

A number of commenters called for all 240 ACECs originally proposed by resource staff to be mapped, individually described and presented to the public with rationale for rejection or inclusion stated and documented. Some commenters said that all 240 ACECs should be recommended for designation, unless otherwise compelling reasons exist.

Other commenters found some of the 50 ACECs proposed in the Draft Plan Alternatives lacked the proper "natural significance" and "criticality" criteria for designation. Concerns about property owner's rights within ACEC areas were expressed. The National Outdoor Coalition alternative recommends 22 ACECs of the 50 proposed in the Draft Plan Alternatives; some of these are reduced in size from the BLM proposal.

Along with numerous concerns on specific ACEC sites, other issues identified include: need for more extensive mineral potential information before ACEC official designation; the creation of "natural hazard" ACECs; the impacts of hunting, collecting, and rockhounding on ACEC values; and the need for buffer zones around ACECs to protect them from effects of the surrounding multiple-use class areas.

Proposed Plan Response

1. Reevaluation - All ACECs submitted by resource specialists have been reevaluated, using criteria which emphasize significance of resource values. As a result of this effort, a number of ACECs was added to the list of proposed sites and a number of those proposed in the Draft Plan Alternatives was dropped. The net effect is an increase in sites from 50 to 73.

2. Documentation - The rationale for ACEC decisions and details to management prescriptions are provided in the Appendix of this report.

5. MINERAL EXPLORATION AND DEVELOPMENT

Summary of Comment

The primary issues discussed in comments on CDCA minerals: What are the impacts to mineral exploration and development activities and to environmental quality from accommodations of these activities?

Some commenters disputed the assertions made in the Draft Plan Alternatives that mineral development was an industry of major importance in the CDCA. Important sources of minerals had already been discovered, and those commodities likely to be discovered were not rare or unique materials. Other commenters supported strict mineral restrictions particularly in regard to the rehabilitation of exploited areas to forestall the environmental impacts such as soil disturbance, wildlife habitat destruction, and groundwater pollution evident from past mineral operations. Some felt that such legislation as the 1872 Mining Law is typical of the extravagant subsidy of private business interests that BLM has been guilty of providing in the past, at a cost of publicly owned natural environments.

Several commenters advocated much more accommodation to mineral exploration and development than was offered in any alternative except the No Action Alternative.

The No Action Alternative was favored by some commenters who argued that existing legislation, such as SMRA and the environmental assessment process, offered further protection of the environment without constricting the widespread availability of land needed for exploration. The multiple-use class system, in the view of some, adds additional over regulation with no significant increase in environmental protection. Reduced mineral and energy extraction will accelerate a national economic situation already troubled by dependence on foreign source of these materials.

Many site specific mineral potential locations and claims were noted by various interests who often called for a more extensive mineral survey before wilderness and other plan designations occur. A cost-benefit analysis of the effects of the draft alternatives on mineral development and extraction activity was urged by several commenters.

A number of commenters addressed the legitimacy of mining claims in which a perfunctory amount of assessment work was done to satisfy the requirements of the law, but was actually being done for purposes other than to seek minerals.

Proposed Plan Response

1. New Regulations - The multiple-use class guidelines have been modified in accordance with the provisions of the new mining regulation 43 CFR 3809. The emphasis, however, is to ensure the highest level of protection to sensitive resources in Class L.

2. Mineral Data Adequacy - A discussion of the CDCA minerals resource inventory, analysis and evaluation is addressed in Appendix XIV. Mineral economics of the California Desert is discussed briefly in the Element and Appendix.

3. More Maps - The Minerals Element has been expanded to include additional maps of identifying mineral potential and economic values.

6. ENERGY AND UTILITY CORRIDORS

Summary of Comment

Most comments supported the concept of preventing the proliferation of rights-of-way through establishment of utility planning corridors. Many of those who favored the minimum 15 corridors of the Protection Alternative also urged a reduction in corridor width to two miles or less (200 meters on either side of an existing facility, according to one comment).

Concern about the cost of such restrictions of options was discussed by several. Those urging a minimum of corridors said they were willing to pay higher utility costs to prevent degradation of natural values. Other comments expressed less willingness to do so and remarked that the rapid utilization of energy costs would make some projects improbable if additional transmissions tracts were added. Utility spokesmen said that if future projects were limited to a few designated corridors and existing facilities, then facility costs and land use impacts would increase substantially while reliability of service would decrease due to overconcentration.

Several letters protested the adoption of particular utility corridors. Residents of Morongo Valley and some communities in Coachella Valley protested siting of corridors in their area.

Many desert residents also objected to the siting of conventional power plants in the Desert because of the consumption of water and pollution of air. These were joined by comments which urged only the locations of power plants which would use local or renewable resources. Some comments encouraged support of vital geothermal and solar energy production, and continuation of systems for coal-fire and nuclear plants. Conversely, some felt that the Desert was an appropriate, perhaps the only, place to site new coal-fire plants because of land use and air quality restrictions in or near metropolitan areas.

Utility spokesmen voiced concern about no negative effects of Interim Wilderness Study Area management or new project proposals. Also, concerns were expressed about access for facility maintenance in corridor description on new energy development.

Proposed Plan Response

1. Number of Corridors - The Plan proposes that 16 utility corridors (one more than shown in the Protection Alternative) be identified in the Energy Production and Utility Corridor Element. In order to provide flexibility for meeting future power transmission neds, a set of "contingency corridors" is identified. These contingency corridors will be added to the desertwide system of corridors upon approval of specific projects. These contingency corridors are a part of this Plan and identified on a special map in the Appendix XV.

2. Community Concerns - The alignment of Corridor K through the Coachella Valley has been clarified to show that it does not pass through the community of Desert Hot Springs. Corridors are not proposed through Morongo Valley.

3. Corridor Width - The Plan retains the corridor width of two miles for existing, and five miles for new, areas. These are planning corridors, not designated rights-of-way. These widths provide the utility companies reasonable latitude in planning future energy delivery systems.

4. Geothermal Potential - The multiple-use class guidelines have been changed to permit greater flexibility in selecting sites for the use of geothermal energy. May allow exploration and development in Class L.

7. BURROS

Summary of Comment

The majority of commenters agreed that burros had potentially adverse effects on desert ecology and that, because they were introduced rather than native species, their number should be reduced in favor of native wildlife. While most responses supported humane reductions in burro herd size, a wide variety of means to accomplish this purpose, including adoption (some felt the BLM program was too slow and costly); sterilization; fencing from water supplies; shooting through hunting permits; sale for pet food or transportation for Desert recreationists and prospectors; and donation to Mexico or to primarily agricultural area for use as draft animals.

Strong expressions of support for protecting burro and horse herds were made by some organizations who described these animals' earned place in the desert ecosystem and their contributions to recreational and other values of the Desert. Conversely, some recommendations were made to completely eliminate these animals from the Desert by whatever means possible.

Some comments mentioned a number of plant and animal species and environmental components threatened by proliferation of burro herds. Bighorn sheep, desert water sources, and riparian vegetation were mentioned frequently. The herd management problem in Saline Valley was also discussed in several letters.

BLM's proposals were criticized by some as too slow and too conservative. The large herd level allowance of the Protection Alternative was called a "mockery" by one reviewer. This was echoed in other letters. Several letters recommended stiffer burro control in Class C areas to protect natural values.

Several letters recommended complete burro removal or reduction to reduce competition with livestock grazing. Some commented that burro control has been extremely ineffective since BLM assumed responsibility from ranch operators for this problem. The recommendations of District Grazing Advisory Boards regarding burro control were cited as examples of proper management techniques.

Proposed Plan Response

1. Burro Management - A more positive approach to the management of horses and burros has been taken. A select number of herd areas have been identified to be managed for the benefit of the herds. The numbers within these herds will be reduced to a level consistent with available forage and water.

2. Reduce Herd Size - Those herds that compete with sensitive resources, particularly wildlife, will be totally removed. The removal of herds from sensitive areas and reduction of numbers within herd management areas will be accomplished through 1985.

8. LIVESTOCK GRAZING

Summary of Comment

Comments relating to this topic debated the social and economic values of grazing in the CDCA and its impacts on desert environment.

Some commenters said that livestock grazing and cattlemen had been discriminated against in the Draft Plan Alternatives. Cattlemen questioned the methodology by which information to establish stocking levels was reached, disputed the existence of conflicts between livestock and bighorn sheep and desert tortoise as they were reported, and asked why no provisions for protection of livestock from vandals and trespass were provided. The poor control of burros was blamed for most wildlife damage, especially to bighorn sheep, and burros were accused of also harming grazing operations. Wildlife in general benefit from ranchers' development of value and other activities, in the view of some. Several comments described grazing as a natural use of the Desert which produced food and fiber from material which would otherwise die each year, and that vegetation is sometimes even enhanced by proper grazing techniques.

Some commenters argued that public land ranges have been degraded in the past by improper grazing and that the environmental consequences of the activities and conflicts with sensitive wildlife values were severe enough to warrant severe restrictions on, or elimination of, the activity. Some commenters accused BLM of sanctioning a traditional activity which has little public benefit, but rather constitutes an extravagant subsidy of a few business interests. A more detailed social and economic analysis of the contribution of grazing to local and regional economies is desired. Some felt that stockyard feeding had made desert grazing impractical and that much more valuable benefits were available from desert lands than those provided by cattle and sheep production. Range carrying capacity and 200-pound-per-acre figures were questioned and disputed by both those favoring and those opposing the activity. Several letters called for more stringent control of the activity in Class C areas.

Other concerns and questions: impacts of grazing on adjacent landowners; nature of regulations in regard to grazing management, validity of statements relating to effects of livestock grazing on wildflower displays and tortoise foraging, and the system of measuring forage in ephemeral ranges.

Proposed Plan Response

1. Protect Tortoise Habitat - Measures have been added to the Livestock Grazing Element to increase protection of the desert tortoise, particularly with respect to sheep grazing.

2. Range Condition - Greater emphasis has been placed on range condition as a detriment of available forage for livestock. Substantial reductions in allocations have been made where only fair or poor range condition has been determined.

3. Protect Bighorn Sheep - Provisions have been added to the Livestock Grazing Element to reduce competition between cattle and bighorn sheep. Removal of cattle grazing from the higher permanent sheep ranges will be one of the principle objectives of those allotment management plans where competition exists.

9. CULTURAL RESOURCES AND NATIVE AMERICAN VALUES

Summary of Comment

Comments on the Cultural Resources and Native American Values Elements were not numerous, but were often quite detailed.

A common concern was public access to cultural resource sites. Several commenters advocated an active interpretive program and development of access to certain historical and archaeological sites. In the view of some, hiding these sites from public knowledge merely to protect them made the artifacts useless. Fines and other penalties for vandalism were preferred to closure of sites. Others felt that unwarranted destruction of sites had resulted from BLM's past practices of carelessly revealing site locations, and that only a few selected sites should be widely publicized and used to educate the public in consideration of these resources.

Other subjects of comment include: the adequacy of existing Federal policy and law in protecting these resources, how well the cultural resource values should be identified and defined in the element, the adequacy of the data base in extrapolating site potential, and the extent to which Native American cultural and religious concerns should influence other CDCA activities.

Proposed Plan Response

1. More Protection - Where possible, protection to cultural resources (archaeologic, historic, and Native American) has been increased over the Draft Balanced Alternative through extension of Class L to include more area containing cultural values. In addition, ACEC status is proposed for important cultural sites located in Class M.

2. Disclosure - It was decided, based on public concerns regarding disclosure of sensitive archaeological and historic sites, not to provide a map of cultural areas in this report. ACECs, and cultural preservation zone maps will be available to those who are charged with implementing the approved Plan.

3. Native American Element - Request from the Native American community to create a separate Native American Element has been accommodated. Native American proposals had been incorporated under the Cultural Resource Element in the draft document. Also, a special map is included showing Indian reservations.

4. Documentation - The appendix will include details on the methodology of the cultural resource program and special plans for mitigation and management of cultural resources.

10. RECREATION

Summary of Comment

Although the management of recreational resources and values is a major concern of much of the public, most of their remarks will be found under the topics of wilderness and motorized vehicle access. The Draft Recreation Element received direct criticism both because of its excessive emphasis on off-road vehicle recreation and its emphasis on wilderness recreation. The management of motorized vehicle competition events was an issue. Vehicle enthusiasts proposed a rest-rotation system which they believe would save areas from damage resulting from repeated and concentrated use of one area for events. How much abuse a single event of this type causes was topic of debate for some reviewers.

Several letters advocated the institution of a Desert Trail and advised its inclusion in the Proposed Plan Recreation Element. Others urged additional wilderness areas or National Park establishment to accommodate a growing interest in non-motorized-oriented recreation. Some of these reviewers felt that the estimation of potential visitors to a Mojave National Park was much too low and that a corrected version would justify both the establishment of this park and the designation of extensive tracts of land for wilderness.

Some vehicle users felt that curtailment of their traditional access to the Desert was caused by inflated claims of vehicle damage to the environment and unfair association with a small percentage of vandals and trespassers. Many felt that desert recreation was impossible without a vehicle. Several noted they had not observed hikers in the Desert in many years of visits. Many letters describing hiking experiences in various parts of the Desert refuted this assertion. Many contained comments about unpleasant confrontations with vehicle-riding recreationists, typically young people on motorcycles.

Recommendations were made to expand the discussion of the importance of rockhounding and hunting in the California Desert. The social and scientific value of rockhounding, in particular, was the topic of several letters. Also urged by some was a rewrite of the Recreation Element to make it more understandable to the public, with locations of floral displays, scenic areas, and other locations of interest displayed for public benefit.

Proposed Plan Response

1. Recreation Opportunities - The Recreation Element has been expanded to graphically provide information regarding recreation opportunities including rockhounding, hunting, bird watching, motorized vehicle play areas, floral display areas, and biking areas. These recreational activities are shown on the Recreation Map, supplement to the "Recreational Opportunities Spectrum" discussed in the Recreation Element and promoted through the multiple-use class guidelines.

2. Recreation Facilities - Based on negative public reaction to proposals for specific facilities such as campgrounds, overlooks, etc., the identification of specific facilities has been dropped from the Recreation Element map. The public generally feels that these "park type" uses are not appropriate in the California Desert.

3. Desert Trail - It was decided not to include the proposed North/South Desert Trail in the Recreation Element at this time. A more detailed analysis of the alignment in relation to other elements and to private land must be completed before adding it to the Plan.

4. Mojave National Park - National Park status is not recommended for the East Mojave area because of other use considerations including grazing and mining. Protection for the outstanding features

and natural values will be provided in the Multiple-Use Classes C and L, and the designation of a number of important ACECs.

ADEQUACY OF ALTERNATIVES

Summary of Comment

A significant number of letters advocated a strong protection philosophy, but found the Draft Protection Alternative inadequate in its general ethical or structural approach, or in one or more of its elements and programs. Some criticized the concept of the multiple-use classes and found its application symptomatic of a perceived "use-biased" management philosophy.

Proponents of a stronger protective stance than that provided in the Draft Protection Alternative felt management concentration in the alternative was not on the protection of sensitive resource values and prevention of the decay of environmental quality, but rather on accommodating consumptive uses. For these reviewers, the most damning qualities of the Draft Protection Alternative were its allowance of the decay of wildlife habitat, as indicated in the Draft Environmental Impact Statement, and its inclusion of "existing roads and ways" and "open area" concepts for motorized vehicle access. The alternative, in the view of these commentators, violated the intent of the National Environmental Policy Act of 1969 (NEPA), subsequent Council on Environmental Quality guidelines, the mandate of FLPMA to protect the natural environment of the California Desert, the requirements of the Endangered Species Act, and the two Presidential Executive Orders regarding off-road vehicle use on public lands.

The number of alternatives was not enough to satisfy a number of commenters. Others considered the Balanced Alternative not really balanced, and a substantial number felt that BLM should have identified a preferred plan in keeping with CEQ guidelines.

Proposed Plan Response

1. Expanding Coverage of Alternatives - The Proposed Plan has been modified to protect a number of listed rare and endangered wildlife species. These critical areas include: Deep Canyon at the north end of the CDCA and the public land located adjacent to the Salton Sea.

2. Other Alternatives - In preparing the Proposed Plan, consideration was given to those alternative plans submitted by the public, i.e., National Outdoor Coalition plan proposal supported by a write-in campaign of its members, and the Sierra Club plan representing a Protection Alternative which differed from the Protection Alternative in the draft.

3. Four Alternatives Adequate - The four alternatives in the draft (including No Action) provided a range of options within which a Preferred or Proposed Plan could be selected. Because of the size and complexity of this program, additional alternatives, if treated equally, would have created an unnecessary burden on both the Bureau and the reviewing public.

4. Balanced Alternative Clarified - The Balanced Alternative is the mid-range alternative between the Protection and Use Alternatives. A more explicit definition should have been included in the draft.

5. "Preferred Plan" - The Proposed Plan is the preferred alternative required by CEQ. The fact that it was not included in the Draft does not violate CEQ guidelines.

DOCUMENTATION AND REVIEW

Summary and Review

In a number of instances the public indicated concern over the lack of documentation in the draft. This was particularly the case with respect to Wilderness and ACEC decisions. Other resource documentation came in for current cultural and mineral resources with respect to data analysis and documentation; Livestock Grazing Element lacked description of the process and methodology used to calculate and allocate forage.

Proposed Plan Response

In response to these comments a comprehensive Appendix to the Proposed Plan and EIS has been produced for those interested in decision rationale, data analysis, procedures, and methodology used in developing the Plan and EIS.

ECOSYSTEM ANALYSIS

Summary of Comment

A substantial number of commenters recommended the ecosystem approach to planning. They view the multiple-use classes as "piecemeal" management approach which favors consumptive uses. According to those holding this view, this management philosophy should be changed toward a holistic ecosystem consciousness.

Proposed Plan Response

In delineating the multiple-use classes for the Proposed Plan, consideration was given to ecological regions as defined by the wildlife specialists. In particular, these regions influenced decisions with respect to the desert tortoise and a number of important wildlife species on the Bureau proposed list of sensitive species. It should, however, be noted that the multiple-use class boundaries must also take into account factors which are not related to ecological areas such as cultural resource potential, mineralized areas, scenic corridors, wilderness quality, and manageability on the ground.

SIZE OF THE DRAFT

Summary of Comment

Some criticized the size and complexity of the Draft. Comments in this category included: too long, too much information, tables confusing, EIS doesn't follow CEQ format, repetitious. A few complimented the Bureau on the Draft and a number complained that not enough information was provided.

Proposed Plan Response

In response to this issue, attempts have been made in developing the Proposed Plan and EIS to provide the public with a brief and more readable report. To reduce repetition, details and comparisons are referenced to the Draft Plan Alternatives or the Appendices.

RANGE OF COMMENTS ON ADEQUACY OF IMPACTS

Summary of Comment

EIS-related comments were most often from government agencies, organizations, and special study groups. Discussion of resource impacts was extensive. Some commenters said that the presentation and content of the EIS failed to describe any connection between resources and impacts and the decisions of the alternatives. Others referred to uneven analysis and lack of adequate social and economic analysis. Data improperly used in the analysis was mentioned. The analysis depended too much on professional judgment, rather than actual studies of impacts.

Proposed Plan Response

1. Evenness - The analysis in this Final EIS is based on a consistent set of assumptions which are intended to produced comparability and a more even treatment of impacts.

2. Multiple-Use Classes - A more understandable relationship between impact analyses and the multiple-use classes is provided in the Final EIS. Broad plan proposals in the form of multiple-use classes must be related to potential risk of impact by only a small percentage of the Desert. Less than 1 percent will ever be mined at a given time; therefore, the risk of impact on a given area is very small.

3. Professional Judgment - Unfortunately, substantive studies of impact relationships are lacking in the Desert. In the absence of these important data, professional judgment must be used in developing a Plan and in assessing impacts. Future studies and a comprehensive monitoring program will provide future guidance to planning and management decisions.

IMPLEMENTATION

Summary of Comment

The major criticism of the implementation proposals in the draft document was that they lacked specific detail. Several commenters called for detailed discussions of program priorities and scheduling, staffing levels, and the amount of funding needed to implement vs. the amount likely to be appropriated by an economy-minded Congress. Because of these uncertainties, the feasibility of the CDCA plan implementation was suspect, in the view of many commenters. Some commenters urged that this uncertainty be reflected in the EIS through the evaluation of alternative implementation level assumptions. Also, since several commenters believed that the cost of implementing each of the alternatives would be substantially different, this lack of cost comparison was an omission of a major evaluation tool.

The seven-year period allotted for the designation of roads and ways was the most criticized feature of the proposed implementation. Many commenters felt that too much adverse environmental damage would occur during that period, or that access would be fostering a professional resource management staff, in particular, the advisability of retaining the Desert Plan Staff for continued inventory and monitoring was criticized. Some commenters cited the lack of governmental coordination in the planning process and concern about future efforts in this area, concerns about too much managerial discretion allowed by implementation proposals, and support for the proposed McCain Valley addition to the CDCA.

Proposed Plan Response

1. Costs and Priorities - A 10-year budget giving program priorities, costs, and staff requirements has been developed for the Proposed Plan. This budget poses the need for a substantial increase in funding over current levels. Priority is given to those programs requiring immediate attention, i.e., ACECs, Wilderness Plans, removal of burros, and approval of roads.

2. Approval of Roads and Ways - In areas requiring the approval (formerly designation) of roads and ways, priority will be given to the most critical areas requiring protection. However, all areas identified for this treatment are scheduled for completion in two years.

B. Response to Governmental Agencies

Section 202 (c) (9) of the Federal Land Policy and Management Act of 1976 requires the Bureau of Land Management to coordinate its land-use planning activities with other levels of government adjacent to and within the planning area being considered by the BLM.

The CDCA encompasses all or portions of eight counties, 23 cities, seven military bases or ranges, 2 national monuments, one State park, one State recreation area, and 15 State agencies with jurisdiction in the CDCA. Adjacent to the CDCA are four national forests, and portions of two states -- Nevada and Arizona. Additionally, members of 37 Indian reservations in or adjacent to the CDCA have traditionally used the Desert.

Members of the Desert Plan Staff have met with all of the government agencies and Indian tribes within or adjacent to the CDCA to discuss the Draft Plan. Subsequently many of these agencies and tribes have submitted written comments in response to the Plan. Some of the comments submitted were not related to an agency's land-use plan or program. These comments however, were considered in preparing the recommended Draft Plan.

The BLM has made changes, where possible, in the recommended Draft Plan to remove inconsistencies with other agency and tribal government plans and programs. Chances were made in the distribution of the multiple-use class designations, guidelines, and the various plan elements. Not all the changes requested by various agencies were made, however. For example, some areas adjacent to Joshua Tree National Monument still remain Class M, mainly because of checkerboard land patterns and mining activities. The boundary of a proposed wilderness area in Whitewater Canyon was not adjusted to accommodate a proposal for a dam site because alternatives are available.

The following government agencies and tribal organizations submitted comments:

Federal

Bureau of Mines
National Park Service
Dept. of the Navy, West Division
Dept of the Army
Water & Power Resources Service (formerly Bureau of Reclamation)
Department of Defense
Department of Transportation
U.S. Geological Survey
U.S. Forest Service
Environmental Protection Agency
Bureau of Land Management - Washington/Nevada/Arizona
Fish and Wildlife Service
Council on Environmental Quality
Department of Energy
Department of Agriculture
Heritage Conservation and Recreation Services
Naval Air Facility, El Centro
U.S. Marines, 29 Palms
U.S. Marine Air Station, Yuma
Department of the Air Force, Edwards A.F.B.

State

Office of Planning and Research
Cal Trans (State & District offices)
Department of Conservation
Resources Agency
Division of Mines & Geology
California Division of Forestry
Department of Fish and Game
Department of Parks & Recreation
Department of Water Resources
California Public Utilities Commission
California Energy Commission
State Lands Commission
Air Resources Board
Native American Heritage Commission
Solid Waste Management Board
State Historic Preservation Office
University of California

Local

Inyo County
Kern County
San Bernardino County
Imperial County
City of Desert Hot Springs
City of Indio
Coachella Valley Association of
  Governments
Imperial Valley Association of Governments

Native Americans

Colorado River - Indian tribes
Cabazon
Chemehuevi
Morongo
Southern California Tribal Chairmans
  Association

Following is a summary of major agency and organization concerns which were not addressed in the response to general public comment. These summaries and responses are presented for local, State, and Federal governmental bodies.

BLM has received a wide spectrum of comments from Federal, State and local agencies in response to the Draft Plan. Many agency comments directly addressed issues of resource management guided through Federal and State statutes. Many issues dealt with BLMs role vis-a-vis other agencies with whom it shares jurisdictional management responsibility. In all cases, agency comments have been specifically and individually addressed.

All agency comments were directly addressed by BLM prior to the release of the Proposed Plan. Written replies to agencies have been prepared by BLM staff. In many cases BLM staff has additionally scheduled meetings with agency representatives to review the response of the Proposed Plan to comments received on the Draft Desert Plan.

The following comments represent specific issues raised in agency review of the Draft Plan and response to comments by the BLM in conjunction with the development of the Proposed Plan. Although these comments represent only a few examples of the hundreds of comments received, they illustrate the kind and latitude of agency comments and BLM response developed in the preparation of the Proposed Plan.

Comment: BLM failed to present the decision-maker and the public with a reasonable range of alternatives to carry out BLM's mandate under Section 601.

BLM Response: In considering the question of additional alternatives, it was decided that the effort necessary to develop and analyze additional balanced multiple-use alternatives would add little to the total range of possibilities presented and analyzed. Given constraints of time and space, assessment of additional alternatives would have resulted in a dilution of treatment for each alternative presented, with little or no gain in the range of options analyzed. Such additional alternatives could generate different cumulative impacts, but even these would fall within the range of cumulative impacts analyzed in the four alternatives.

As presented, the five alternatives selected (No Action, Protection, Balanced, Use and Proposed Plan) generally provide a multiple-use class option in every area of the Desert, except those where existing law and resource condition and use preclude offering reasonable options.

Comment: Enforcement of management guidelines established in the Plan have not been addressed in the Draft Plan.

BLM Response: Enforcement of the rules related to Desert use is addressed in the Implementation section of the Proposed Plan. In addition, a program of monitoring the effects of various uses of the Desert is also discussed.

Comment: BLM needs to document Wilderness and ACEC decisions.

BLM Response: Wilderness and ACEC decisions have been documented and are available in the appendices to the Plan.

Comment: Plan does not appear to provide sufficient protection of fragile ecosystems.

BLM Response: The Proposed Plan (in contrast to the Balanced Alternative) has increased the number of acres in Class C approximately 2.2 percent and, in Class L approximately 5 percent and has decreased the number of acres in Class M approximately 7.7 percent. The number of acres in Class I have been increased by 0.5 percent. In addition, all uses of the California Desert must conform to existing policies and laws with respect to the use of land in the CDCA.

Comment: A clearer basis for choice among reasonable alternative grazing plans should be provided.

BLM Response: Grazing allocations in the Proposed Plan will be based upon carrying capacity of the range and considerations for vegetation, wildlife, wild horses, and burros.

Comment: The plan needs a more thorough analysis of mineral potential in the CDCA.

BLM Response: We have developed a methodology of analysis which parallels California Division of Mines and Geology approach. It appears in appendices to the Plan.

Comment: Multiple-use class guidelines which allow consumptive use of sensitive areas and significant Native American religious areas directly conflict with statutes and constitutional guarantees protecting religious freedom.

BLM Response: All actions under the Proposed Plan will be consistent with both State and Federal Native American religious freedom statutes. Further, BLM has entered into cooperative management agreements to ensure Native American participation and the consideration of sensitive cultural values in all Bureau actions.

Comment: A potential conflict exists between military flights and training corridors and BLM's proposed wilderness areas.

BLM Response: Military overflights of wilderness have not been determined to have a sufficiently detrimental effect on proposed wilderness areas to affect suitability. The Proposed Plan recommends that Congress not consider the presence of military overflights as grounds for not designating an area as wilderness. Military overflights would not be constrained by designation.

Comment: It is anticipated that the Proposed Plan will have many areas of inconsistency with different local government plans.

BLM Response: The goals of local governments vary widely, as reflected in the substantial difference in the objectives of Adopted General Plans of the various counties and cities. The advice and comment received from local government, if accepted literally, would produce an uncoordinated and internally inconsistent Plan for management of public lands of the California Desert. This would be counter to the legislative mandate and national public interests. However, every attempt has been made to reconcile those semantic and procedural differences to achieve the greatest possible consistency with local plants.

Comment: Not enough emphasis is placed on the importance of military spending, jobs, and presence in the Desert.

BLM Response: Material has been added in the Plan and EIS reflecting the military use of withdrawn lands in the Desert.

References

VII

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A. SECTION 601 FLPMA 103
B. LIST AND ABSTRACT OF APPENDICES 105
C. LIST OF PREPARERS 111
D. INDIVIDUALS, ORGANIZATIONS, and AGENCIES to whom document is being sent 114

A. Section 601 of Federal Land Policy and Management Act

CALIFORNIA DESERT CONSERVATION AREA

Sec. 601. (a) The Congress finds that --

(1) the California desert contains historical, scenic, archaeological, environmental, biological, cultural, scientific, educational, recreational, and economic resources that are uniquely located adjacent to an area of large population;

(2) the California desert environment is a total ecosystem that is extremely fragile, easily scarred, and slowly healed;

(3) the California desert environment and its resources, including certain rare and endangered species of wildlife, plants, and fishes, and numerous archaeological and historic sites, are seriously threatened by air pollution, inadequate Federal management authority, and pressures of increased use, particularly recreational use, which are certain to intensify because of the rapidly growing population of southern California;

(4) the use of all California desert resources can and should be provided for in a multiple use and sustained yield management plan to conserve these resources for future generations, and to provide present and future use and enjoyment, particularly outdoor recreation uses, including the use, where appropriate, of off-road recreational vehicles;

(5) the Secretary has initiated a comprehensive planning process and established an interim management program for the public lands in the California desert; and

(6) to insure further study of the relationship of man and the California desert environment, preserve the unique and irreplaceable resources, including archaeological values, and conserve the use of the economic resources of the California desert, the public must be provided more opportunity to participate in such planning and management, and additional management authority must be provided to the Secretary to facilitate effective implementation of such planning and management.

(b) It is the purpose of this section to provide for the immediate and future protection and administration of the public lands in the California desert within the framework of a program of multiple use and sustained yield, and the maintenance of environmental quality.

(c)(1) For the purpose of this section, the term "California desert" means the area generally depicted on a map entitled "California Desert Conservation Area -- Proposed" dated April 1974, and described as provided in subsection (c)(2).

(2) As soon as practicable after the date of approval of this Act, the Secretary shall file a revised map and a legal description of the California Desert Conservation Area with the Committees on Interior and Insular Affairs of the United States Senate and the House of Representatives, and such map and description shall have the same force and effect as if included in this Act. Correction of clerical and typographical errors in such legal description and a map may be made by the Secretary. To the extent practicable, the Secretary shall make such legal description and map available to the public promptly upon request.

(d) The Secretary, in accordance with section 202 of this Act, shall prepare and implement a comprehensive, long-range plan for the management, use, development, and protection of the public lands within the California Desert Conservation Area. Such plan shall take into account the principles of multiple use and sustained yield in providing for resource use and development, including, but not limited to, maintenance of environmental quality, rights-of-way, and mineral development. Such plan shall be completed and implementation thereof initiated on or before September 30, 1980.

(e) During the period beginning on the date of approval of this Act and ending on the effective date of implementation of the comprehensive, long-range plan, the Secretary shall execute an interim program to manage, use and protect the public lands, and their resources now in danger of destruction, in the California Desert Conservation Area, to provide for the public use of such lands in an orderly and reasonable manner such as through the development of campgrounds and visitor centers, and to provide for a uniformed desert ranger force.

(f) Subject to valid existing rights, nothing in this Act shall affect the applicability of the United States mining laws on the public lands within the California Desert Conservation Area, except that all mining claims located on public lands within the California Desert Conservation Area shall be subject to such reasonable regulations as the Secretary may prescribe to effectuate the purposes of this section. Any patent issued on any such mining claim shall recite this limitation and continue to be subject to such regulations. Such regulations shall provide for such measures as may be reasonable to protect the scenic, scientific, and environmental values of the public lands of the California Desert Conservation Area against undue impairment, and to assure against pollution of the streams and waters within the California Desert Conservation Area.

(g)(1) The Secretary, within sixty days after the date of approval of this Act, shall establish a California Desert Conservation Area Advisory Committee (hereinafter referred to as "advisory committee") in accordance with provisions of section 309 of this Act.

(2) It shall be the function of the advisory committee to advise the Secretary with respect to the preparation and implementation of the comprehensive, long-range plan required under subsection (d) of this section.

(h) The Secretary of Agriculture and the Secretary of Defense shall manage lands within their respective jurisdictions located in or adjacent to the California Desert Conservation Area, in accordance with the laws relating to such lands and wherever practicable, in a manner consonant with the purpose of this section. The Secretary, the Secretary of Agriculture, and the Secretary of Defense are authorized and directed to consult among themselves and take cooperative actions to carry out the provisions of this subsection, including a program of law enforcement in accordance with applicable authorities to protect the archeological and other values of the California Desert Conservation Area and adjacent lands.

(i) The Secretary shall report to the Congress no later than two years after the date of approval of this Act, and annually thereafter, on the progress in, and any problems concerning, the implementation of this section, together with any recommendations, which he may deem necessary to remedy such problems.

(j) There are authorized to be appropriated for fiscal years 1977 through 1981 not to exceed $40,000,000 for the purpose of this section, such amount to remain available until expended.

B. List of Abstract of Appendices

A total of 15 appendices bound in seven volumes have been prepared to supplement the Final EIS and Proposed Plan. These appendices provide documentation, methodology, and further information that may be helpful in reviewing the Final EIS and Proposed Plan. All appendices are available at the libraries listed in the second part of this section, and at BLM's Washington D.C., California State, Bakersfield and California Desert District (Riverside) Offices, addresses of which are provided following the library list. In addition, copies may be requested by calling or writing the California Desert District office. Persons requesting copies should specify volume letter.

For the convenience of reviewers, a summary of each appendix is provided below. Copies of Volume A have been widely distributed, including to all those who commented on the Draft Plan Alternatives and EIS. Other appendices have been mailed to key organizations, agencies, and individuals.

Volume A

I - Summary of Public Comment on Draft Plan and Environmental Impact Statement

This appendix summarizes the oral and written comments received during the 90-day public review period. It includes a summary statement on the substance of comments received, representative examples of comments, and a list of organizations commenting. The League of Women Voters Audit Report is also included.

II - Summary Rationale of Proposed Planning Actions

Organized by planning unit, this appendix summarizes the planning decisions made in each area. It also outlines resource values considered in the decision process. It includes simple maps delineating major planning decisions.

Volume B

III - Decision Rationale and Summary Analyses of Wilderness Study Areas

A discussion of the wilderness inventory and study phase process is included, along with a specific writeup on each Wilderness Study Area. For each of the 137 WSAs there is a summary of resource values considered, public comments received, impact analysis of wilderness and a wilderness decision rationale for the Proposed Plan.

Volume C

IV - Areas of Critical Environmental Concern

This appendix contains a documentation summary of 184 areas nominated for ACEC designations. Each summary describes resource values, decision rationale and management prescriptions. Also, included is information on the existing 34 Special Areas.

V - Recreation

A summary of the process for determining areas suitable for motorized vehicle "free play" precedes a detailed description of the 32 areas evaluated. Included with each area description is an evaluation matrix which outlines the sensitive resource values and site characteristics. A decision rationale and analysis of potential impacts resulting from the proposals is also included.

VI - Motorized Vehicle Access

This appendix contains a review of selected laws, Executive Orders and regulations affecting CDCA vehicle access designation and management policy. Included is a glossary of terms used in the Element, an index map of the vehicle route series, and a discussion of monitoring.

Volume D

VII - Cultural Resources

Included in this appendix are descriptions of methodologies used and sensitivity-significance determinations made. Mitigation, protection measures, cultural resource management plans, and monitoring are discussed. Also included are discussions of research designs and educational awareness programs.

VIII - Native American

The appendix consists of the complete text of the Memorandum of Agreement between the State Native American Heritage Commission and BLM on coordinating tribal review of Environmental Impact Statement documentation. Also included is a complete text of the Memorandum of Understanding among the Native American Heritage Commission, the State Historic Preservation Office and BLM, pertaining to BLM's California policy for Native American concerns and cultural resource management. There is a discussion of traditional Native American values, legislation which affects Native American values, and consideration of sensitivity and potential for mitigation. Additional appendices address the nature of Native American cultural values and pertinent legislation.

Volume E

IX - Wildlife

This appendix contains a description of the affected environment, and a list of wildlife species in the CDCA. Impact assessment techniques are outlined.

X - Vegetation

The appendix covers management objectives, reports on desert agriculture, discussions of unusual plant assemblages, policies on rare, threatened or endangered plants, detailed examples of monitoring techniques, discussion of the effects of surface disturbances on vegetation, and flower and vegetation profiles.

XI - Soils

Soils inventories conducted throughout the CDCA are listed along with a table summarizing arable lands investigation. Soils sensitivity ratings are included, as are evaluations of impacts of livestock grazing and major mining activity.

Volume F

XII - Wild Horses and Burros

Changes made from the Draft are discussed, as well as methodology for calculation of recommended population levels within the concentration areas for the animals. A detailed table displays removal rate, cost of removal and adoption for wild horses and burros.

XIII - Livestock Grazing

Livestock grazing approaches are the central subject matter: carrying capacity and forage allocation methodology for allotments; management decisions resolving conflicts, allocation processes for perennial, ephemeral and perennial/ephemeral forage, plant species, and other topics. Socioeconomic analyses of grazing in the CDCA are presented. The consultation process and implementation process for decisions are also discussed.

Volume G

XIV - Geology - Energy - Minerals

Contained is a description of the inventory, methodology analysis and evaluation for G-E-M resources. Also included is a discussion of impact methodology and mineral economics in the CDCA.

XV - Energy Production and Utility Corridors

A description of the contingent corridors that may be considered in the future is discussed. A map of these corridors is also included.

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C. List of Preparers

The completion of the Final EIS and Proposed Plan is the result of four years of concentrated work and interest by the public, Advisory Committee, contractors., and many BLM employees. The project was developed primarily under the direction of the California State Office, BLM, and carried out by the Desert Plan Staff in Riverside, California, with the assistance of BLM staff throughout California and other BLM offices.

The list presented below includes the names, academic qualifications, and professional experience of those primarily responsible for the Final Environmental Impact Statement, in accordance with Council on Environmental Quality guidelines. In addition, the name and position of those responsible for management review, project coordination, Plan development and EIS support, and document preparation are acknowledged.

ENVIRONMENTAL IMPACT STATEMENT

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Kristin Berry	Zoologist	Ph.D. Zoology 11 years experience
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Jerry Boggs	Wildlife Biologist	Ph.D. Wildlife Biology 7 years experience
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Pam Elliot	Visual Resource Specialist	B.A. Landscape Architect 3 years experience
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Roger Haskins	State Geologist	M.A. Geology 7 years experience
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Robert Laidlaw	Anthropologist	M.A. Anthropology 7 years experience
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Environmental Impact Statement (continued)

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D. Individuals, Organizations, and Agencies

TO WHOM THE DOCUMENT IS BEING SENT

This document is being sent to each individual, organization, Federal, State, and local agency; and Native American Tribal Council who gave comment on the Draft Plan and EIS.

In addition, the document is being sent to the government agencies, Native American Tribal Councils, and public service and private organizations listed in the Draft Plan alternatives document on page 422.

Fourteen thousand people who were on the mailing list but did not respond to the Draft Plan and EIS were notified by card of the availability of the document, and copies are being sent to those individuals who responded to that notification.

Also, copies of the Final EIS and Proposed Plan plus all appendices were mailed to the libraries listed under Section VI B of this EIS.

Volume A of the appendices, which includes Appendix 1, "Summary of Public Comments on Draft Plan and Environmental Impact Statements," and Appendix 2, "Summary Rationale of Proposed Planning Actions", were mailed to individuals who commented on the Draft Plan and EIS.

The Proposed Plan

THE PROPOSED PLAN

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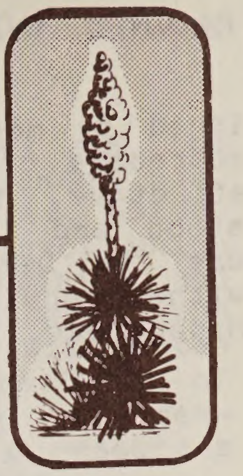
I. Plan Goal



findings, concepts, and intent

In 1976 Congress passed the Federal Land Policy and Management Act (FLPMA) - a law to direct the management of the public lands of the United States. In that law a special section, Section 601, was included to give direction about a special place - the California Desert Conservation Area (CDCA). In that section Congress required the preparation of this comprehensive long-range Plan for the CDCA. It is the purpose of this Plan to establish guidance for the management of the public lands of the California Desert by the Bureau of Land Management in clear accordance with the intent of the Congress and the people of the United States, as expressed in the law. To understand the Plan, the reader should be thoroughly familiar with FLPMA, particularly Section 601, which is printed in its entirety in the references section of the final EIS.

> The goal of the Plan is to provide for the use of the public lands and resources of the California Desert Conservation Area, including educational, scientific, recreational, and economic uses, in a manner which enhances wherever possible -- and which does not diminish, on balance -- the environmental, cultural, and aesthetic values of the desert and its future productivity.

This goal is to be achieved in the Plan through the direction given for management actions and resolution of conflicts. Direction is stated first on a geographic basis in the guidelines for each of the four Multiple- Use Classes. Within those guidelines further refinement of direction is expressed in the goals for each Plan Element. Direction is also expressed in certain site-specific Plan decisions such as Areas of Critical Environmental Concern.

The Plan's goal, and its implementation, are based upon the following findings, principles, and concepts. They have been developed within the mandate of the law and public policy reflecting public comment and the advice of the California Desert Advisory Committee.

Resource Basis

The Plan uses, as its basis for meeting the needs of the country for social and economic goods, services, and values, the best available information about resources of the Desert, in particular its soil, vegetation, water, air, and minerals -- the basic and finite things upon which all life depends. Maintenance of the productive potential of these resources on a global scale will determine the future of mankind, thus this must be the heart and foundation of any land-use plan.

The CDCA embraces some 25 million acres of which half is public land administered by the Bureau of Land Management. Since it is plainly impractical to try to learn all there is to know about such a vast and diverse area before completing a Plan, or to try to stop and make the world wait until we do know, the Plan carries a major commitment to monitor the effects of decision and to guide future adjustments to those decisions in concert with an ever-increasing body of knowledge.

Unique Setting

The Plan recognizes the special fragility of Desert lands and the kinds of stress that human impacts place on arid ecosystems. This does not mean that California Desert lands and resources cannot be used -- far from it -- but the use must take place in sometimes special ways. This is particularly important because of the unique location of the CDCA next to one of the largest metropolitan populations in the United States. It is this above everything else that makes the CDCA a special place requiring a special plan.

The unique setting of the CDCA means that the Plan must include creative ideas and new ways of solving old problems. In fact, the most vexing management problem in the CDCA -- how vehicle access to its millions of acres can be controlled to prevent continuing degradation of California Desert resources without destroying the sense of freedom and solitude cherished by most Desert users -- has to be addressed creatively in the Plan. To be effective, this approach must be understood and implemented by the people who use the Desert, and enforced fairly and without equivocation by the Bureau of Land Management.

Management Principles

The management principles contained in the law (FLPMA) -- multiple use, sustained yield, and the maintenance of environmental quality -- are not simple guides. Resolution of conflicts in the California Desert Plan require innovative management approaches for everything from wilderness and wildlife to grazing and mineral development. These approaches include:

* Seeking simplicity for management direction and public understanding, avoiding complication and confusion in detail which would make the Plan incomprehensive and unworkable.

* Development of decision-making processes using appropriate guidelines and criteria which provide for public review and understanding. These processes are designed to help in allowing for the use of Desert lands and resources while preventing their undue degradation or impairment.

* Responding to national priority needs for resource use and development, both today and in the future, including such paramount priorities as energy development and transmission, without compromising the basic desert resources of soils, air, water, and vegetation, or public values such as wildlife, cultural resources, or magnificent desert scenery. This means, in the face of unknowns, erring on the side of conservation in order not to risk today what we cannot replace tomorrow.

* Recognizing that the natural patterns of the California Desert, its geological and biological systems, are the basis for planning, and that human use patterns, from freeways to fence lines, define its boundaries. Only in this way can the public resources be understood and protected in a Plan that can be publicly comprehended, accepted, and followed.

Planning for the Future

The function of this Plan, like any plan, is to help share the shaping of an unknown future. In keeping with our habit of describing things by putting labels on them and classifying even time itself into neat divisions, the Plan will take for its framework the next 20 years -- the remainder of the century -- but many of the decisions of the Plan also consider the effect of our actions over a much longer period of time.

The Plan recognizes that the public lands of the California Desert belong to all the people of the United States, that these lands are not isolated but are spread out among or are adjacent to lands managed by other agencies of Federal, State, and local government, military installations, Indian reservations, and private lands; and that public land management decisions must relate to State and local laws as well as Federal. The Plan is based on a "good neighbor" concept and will treat considerately the needs and concerns of other landowners and jurisdictions in the Desert.

Congress established the CDCA and FLPMA within a broader context of laws governing the public lands and providing for both use and protection of a variety of public resources. Thus, the Plan requires the protection of Endangered and Threatened species of plants and wildlife and cultural resources as well as providing for the development of mineral resources, for livestock grazing and other consumptive uses, all directed by law.

Interrelationships between sometimes conflicting legal mandates add to the complexity of public land management. Here also, the Plan proposes that creative solutions to conflicts be sought. The Public review and input which has been inherent in the planning process must continue with adoption of the Plan as site-specific decisions implementing the Plan, and new proposals, are being made.

Shared Responsibility

The Plan recognizes that government by bureaucracy in a democratic society must be limited, and that the responsibility for wise management of the Desert's resources must be shared by all citizens. The Federal dollars expended in management are investments needed to protect our capital in public land resources and to insure that these resources are available and productive for those who come after us. The money spent and the service provided by dedicated public employees must be matched by a commitment from the people. Thus, the Plan requires programs of information, education, and volunteer services as components of its implementation.

In order to complete and carry out the Plan, the Bureau of Land Management has, under its California State Office, established a California Desert District which will be responsible for maintaining and implementing the Plan and carrying out the management of the public lands within the CDCA. The Plan includes an analysis of and a commitment to a level of implementation appropriate to the public resources and management needs of the Desert.

Intent of the Plan

Based upon these principles and concepts the intent of the CDCA Plan is to ensure as nearly as humanly possible that the recognition brought by Congress and the people into law -- that the California Desert is not a wasteland but a precious public resource -- is effectively guaranteed in its management, that the uses of today do not preclude the users of tomorrow, and that we preserve and develop these assets wisely with full regard for their social and environmental as well as economic values.

[illegible]

Changes in the Future

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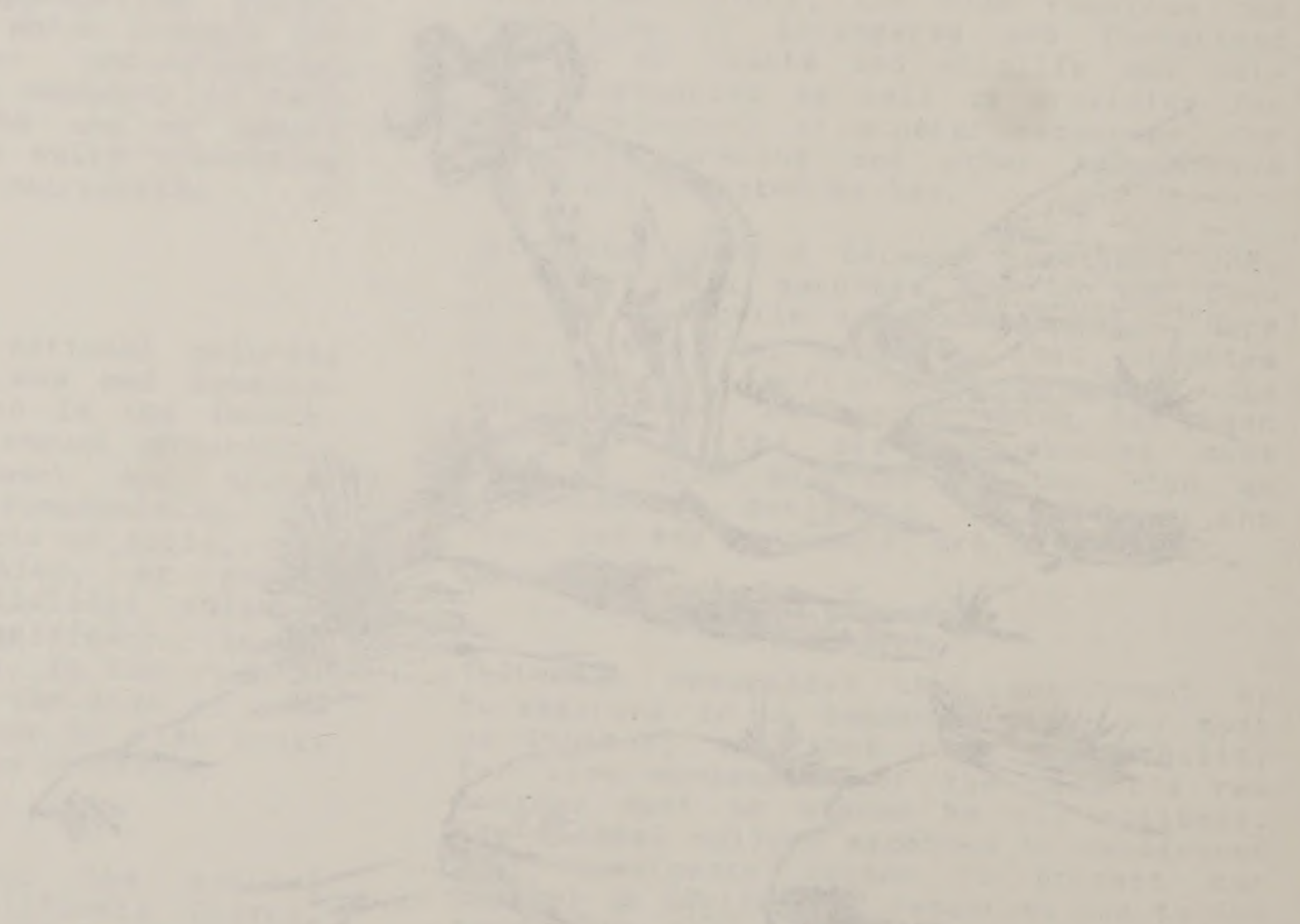


Multiple-Use Classes

II

pp. P4–12

A. PURPOSE AND GENERAL GUIDELINES P-4
B. MULTIPLE USE CLASS GUIDELINES 6

A. Purpose and General Guidelines

1. DESCRIPTION AND PURPOSE

All of the public lands in the CDCA under BLM management, except for a few small and scattered parcels, (approximately 300,000 acres) have been designated geographically into four-multiple use classes. The classification was based on the most appropriate, or "best" and "highest" uses for each geographic area. A map depicting the use classification assigned to each location can be found in the back cover pocket of this document.

Four multiple-use classes are used in the Plan. Each describes a different type and level or degree of use which is permitted within that particular geographic area. The names and purposes of each class are:

Multiple Use Class C is a "Controlled Use" class, meaning that use of the public lands in areas so designated will be carefully controlled for specific reasons. The primary purpose of this class is: First, to recommend areas as suitable for wilderness as designation by Congress; and, second, to provide opportunities for the use and enjoyment of all such areas designated by Congress as wilderness, while preserving their wilderness characteristics. Prior to Congressional determination, uses in Class C lands and in other Wilderness Study Areas, would be managed in order not to impair the wilderness characteristics and values of those lands (see "Wilderness Study Areas: Interim Management", and the Wilderness Element). These characteristics and values have been defined in the Wilderness Act of 1964 as "...areas where the earth and its community of life are untrammeled by man; primeval in character and influence affected primarily by the forces of nature with man's work substantially unnoticeable, and have outstanding opportunities for solitude for primitive, unconfined recreation, while being of sufficient size to make preservation in an unimpaired condition practical...".

Multiple Use Class L is a "Limited Use" class. Its purpose is to protect sensitive, natural, scenic, ecological, and cultural resource values. Public lands designated as Class L will be managed to provide for generally low-intensity, carefully controlled multiple use and development of resources; while, ensuring that sensitive natural values are not diminished.

Multiple Use Class M is a "Moderate Use" class based on a controlled balance between full use and full preservation of the public lands; i.e., a moderated management. Its purpose is to provide for a wide variety of present, and future uses, including mining, grazing, recreation and energy and utility development. Class M management is also designed to conserve Desert resources and to mitigate damage to these resources which permitted uses may have caused.

Multiple Use Class I is an "Intensive Use" class. Its purpose is to provide for concentrated use of lands and resources to meet human needs. Reasonable protection will be provided for sensitive natural and cultural values. Mitigation of resource impacts and rehabilitation of impacted areas will occur insofar as possible.

As the map (No. 2, "Proposed Plan") inserted in the back cover pocket of this document shows, these classes are assigned to the 12.1 million acres of BLM-administered public lands in the following proportions:

CLASS	ACREAGE (000)	% TOTAL OF BLM-LANDS
C	2,070	17.1
L	5,939	49.0
M	3,325	27.4
I	497	4.1
Unclassified	300	2.4
	12,131	100

The Multiple-Use Class Guidelines, describe land use and resource management guidelines for 19 land uses and resources as they apply to each class.

2. WILDERNESS STUDY AREAS:

Interim Management

During the period that Wilderness Study Areas (WSAs) recommended as suitable for inclusion in the National Wilderness Preservation System are under consideration by the Congress, the overall management of all WSAs identified in the CDCA will be conducted according to BLM's "Interim Management Policy and Guidelines for Land Under Wilderness Review (December 12, 1979)", and in accordance with the multiple-use class designation into which the separate WSA falls, whichever management policy is the more restrictive.

Since the Class C guidelines will be deferred during the interim management period for the CDCA, areas designated as Class C will be managed in accordance with Class L guidelines and in conjunction with the Interim Management Policy for WSAs. Map No. 1, "Interim Plan," in the back cover pocket of this document, shows the location of all WSAs overlaid on the multiple-use class proposals. On the back of this map are printed appropriate excerpts from the Interim Management Policy. The Wilderness Element, in Section III of the Proposed Plan, contains a more complete explanation of how this policy will be applied in the CDCA.

3. GENERAL GUIDELINES

This Plan has established certain basic guidelines which are applicable to each of the multiple-use classes, and which will be followed throughout the public lands of the CDCA.

Valid Existing Rights

All official permitted action taken under this Plan would be subject to valid existing rights as provided for in Sections 601, 603 and 701 of the Federal Land Policy and Management Act of 1976.

Environmental Assessments and Impact Statements

For some uses permits must be obtained which require the preparation of an Environmental Assessment or an Environmental Impact Statement. The provisions for these requirements can be found in Departmental procedures (516 DM 1-6) and related BLM guidance, or ascertained at the appropriate BLM permitting office.

Permits and Authorizations

Laws and regulations governing the issuance of permits and/or authorizations for uses of the public lands can be found in Titles 30, 36, and 43 of Code of Federal Regulations, or determined at any BLM office.

Authorized Officer

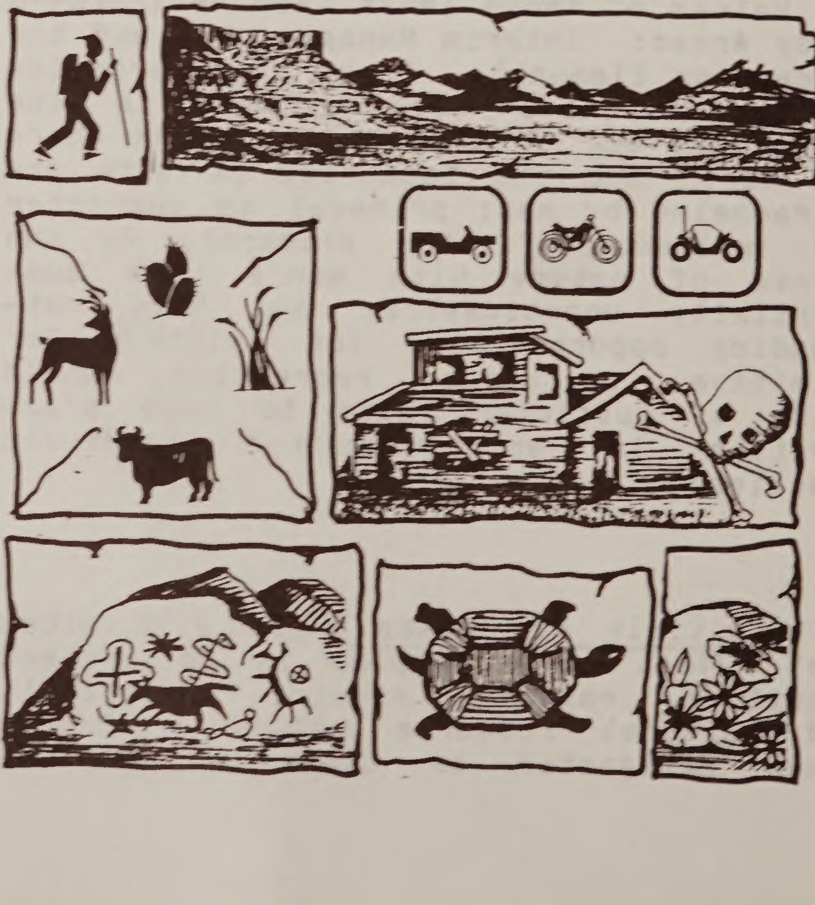
For purposes of this Plan and its implementation, "Authorized Officer" means the California State Director of the Bureau of Land Management, or the BLM California Desert District Manager, or any other BLM official so designated in accordance with Bureau Order 701 or amendments thereto.

Education and Research

Research activities conducted on public lands in the CDCA will require the approval of the Authorized Officer. Whenever required, all permits, authorizations and/or licenses will be issued at the discretion of the Authorized Officer.

Health, Safety and General Welfare

Temporary or emergency-related uses of the public lands in the CDCA for the purposes of protecting the health, safety and general welfare of the public will be allowed at the discretion of the Authorized Officer. These uses may include, but are not limited to, repairs and maintenance of public utility and communication facilities; public roads and highways, including minor realignments for safety purposes; search and rescue operations; fire prevention and/or suppression; law enforcement activities; and any other related activity of a temporary, emergency or urgent nature.



B. Multiple Use Class Guidelines

The class designation governs the type and degree of land use actions that are allowed within the areas defined by class boundaries. All land use actions and resource management activities on public lands within a multiple-use class delineation must meet the guidelines given for that class. The guidelines are arranged according to the following list:

1. Agriculture
2. Air Quality
3. Water Quality
4. Cultural Resources
5. Native American Values
6. Electrical Generation Facilities
7. Transmission Facilities
8. Communication Sites
9. Fire Management
10. Harvesting
11. Land Tenure Adjustment
12. Livestock Grazing
13. Mineral Exploration and Development
14. Motorized Vehicle Access
15. Recreation
16. Waste Disposal
17. Wildlife Species and Habitat
18. Wetland / Riparian Areas
19. Wild Horses and Burros

	MULTIPLE-USE CLASS C Controlled Use	MULTIPLE-USE CLASS L Limited Use	MULTIPLE-USE CLASS M Moderate Use	MULTIPLE-USE CLASS I Intensive Use
1. AGRICULTURE	Agricultural uses (excluding livestock grazing) are not allowed.		Agricultural uses will be allowed on suitable land classified for these purposes.	
2. AIR QUALITY	These areas will be managed to protect their air quality and visibility in accordance with Class II objectives of Part C of the Clean Air Act Amendments unless otherwise designated another Class by the State of California (See 42 USC 7474, and the final regulations if and when promulgated).			
3. WATER QUALITY	These areas will be managed to maintain and enhance both surface and ground water resources.	Areas designated in this class will be managed to minimize degradation of the water resources. Best management practices, developed by the Bureau during the planning process outlined in the Clean Water Act, Section 208, and subsequently, will be used to avoid degradation and to comply with Executive Order 12088.		Areas designated in this class will be managed to minimize degradation of water resources. Best management practices, developed by the Bureau during the planning process outlined in the Clean Water Act, Section 208, and subsequently, will be used to keep impacts on water quality minimal and to comply with Executive Order 12088.

<table>
<tr><th>(continued)</th><th>MULTIPLE USE CLASS C
Controlled Use</th><th>MULTIPLE USE CLASS L
Limited Use</th><th>MULTIPLE USE CLASS M
Moderate Use</th><th>MULTIPLE USE CLASS I
Intensive Use</th></tr>
<tr><td>4.
CULTURAL RESOURCES</td><td colspan="4">Archaeological and paleontological values will be preserved and protected. Procedures described in 36 CFR 800 will be observed where applicable. Memorandum of Agreement being negotiated between BLM, California State Historic Preservation Officer and National Advisory Council on Historic Preservation to protect cultural resource values.</td></tr>
<tr><td>5.
NATIVE AMERICAN VALUES</td><td colspan="4">Native American Cultural and religious values will be preserved where relevant and protected where applicable. Native American Group(s) shall be consulted. Memorandums of Agreement and Understanding signed between BLM and the Native American Heritage Commission pertaining to Native American concerns and cultural resources.</td></tr>
<tr><td rowspan="2">6.
ELECTRICAL GENERATION FACILITIES</td><td rowspan="2">Electric generation plants are not allowed.</td><td>Electric generation plants may be allowed (see wind/solar/geothermal below).</td><td colspan="2">All types of electric generation plants will be allowed in accordance with State, Federal, and local laws.</td></tr>
<tr><td colspan="3">Existing facilities may be maintained and upgraded or improved in accordance with special use permits or by amendments to rights-of-way.</td></tr>
<tr><td>- Nuclear and Fossil Fuel Power Plants</td><td colspan="2">Not allowed.</td><td colspan="2">Allowed in accordance with Federal, State and local laws.</td></tr>
<tr><td>- Wind / Solar Power Plants</td><td>Not allowed.</td><td colspan="3">Will be considered after completion of an EIS.</td></tr>
<tr><td>- Geothermal Power Plants</td><td>Not allowed.</td><td colspan="3">Are allowed pursuant to licenses issued under 43 CFR Section 3250, et. seq. Environmental analysis will be required.</td></tr>
<tr><td rowspan="2">7.
TRANSMISSION FACILITIES</td><td>New transmission facilities for electricity, gas, water, and telecommunications are not allowed and new licenses or rights-of-way for these purposes will not be granted, except as provided for in the Wilderness Act of 1964 - 16 USC 1133 (d) (4) or as may be specified by Congress.</td><td colspan="3">New gas, electric transmission, water, and trans-desert telecommunications facilities will be allowed only within designated corridors (see Utility Corridors Element).</td></tr>
<tr><td>Existing facilities may be maintained subject to wilderness management plan.</td><td colspan="3">Existing facilities within designated corridors may be maintained and upgraded or improved in accordance with existing right-of- way grants, special use permits, or by amendments to rights-of-way.</td></tr>
<tr><td rowspan="2">- Distribution Facilities</td><td>New licenses or rights-of-way for distribution facilities to serve private properties will not be granted. Existing facilities may be maintained or improved but not expanded.</td><td colspan="3">Existing facilities may be maintained and upgraded or improved in accordance with special use permits or by amendments to rights-of-way.</td></tr>
<tr><td></td><td>New distribution systems are allowed and will be placed underground where feasible, except where this would have a more detrimental</td><td colspan="2">New distribution facilities are allowed and will be placed within existing rights-of-way where they are reasonably available.</td></tr>
</table>

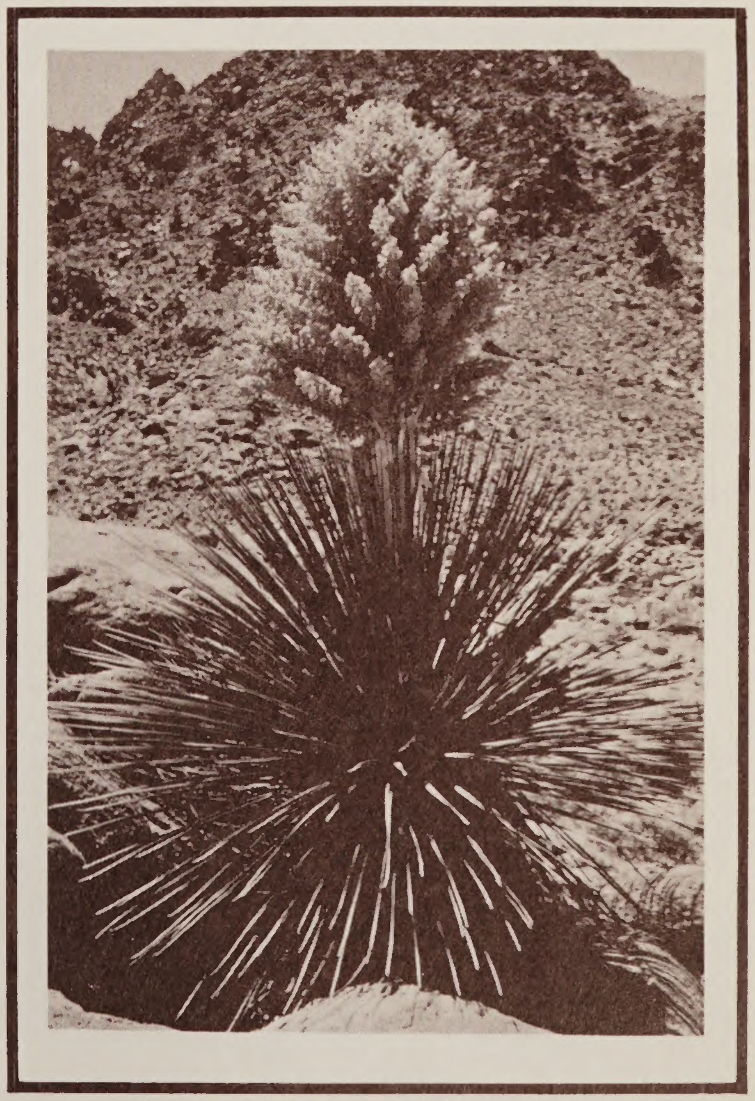
(continued)	MULTIPLE USE CLASS C Controlled Use	MULTIPLE USE CLASS L Limited Use	MULTIPLE USE CLASS M Moderate Use	MULTIPLE USE CLASS I Intensive Use
- Distribution Facilities (continued)		effect on the environment than surface alignment. In addition, new distribution facilities will be placed within existing rights-of-way where they are reasonably available.		
8. COMMUNICATION SITES	New communication sites are not allowed unless required for protection of wilderness values or visitors.	New communication sites will be allowed on designated areas (see map in Utility Element).	New sites are allowed	
	Maintenance and operation of existing sites and facilities are allowed subject to wilderness management plan.	Existing facilities may be maintained and utilized in accordance with right-of-way grants and applicable regulations.		
9. FIRE MANAGEMENT	Fire suppression measures will be taken in accordance with specific wilderness fire management plans to be followed by the authorized officer, and may include use of motorized vehicles, aircraft, and use of fire retardant chemicals.	Fire suppression measures will be taken in accordance with specific fire management plans subject to such conditions as the authorized officer deems necessary such as use of motorized vehicles, aircraft, and fire retardant chemicals.		
10. HARVESTING (Native Plant)	Collection of plant parts, fruits, nuts, blossoms, or other plant products will be allowed by permit. Commercial harvesting will not be allowed. Removal of whole live plants (trees excepted) is allowed only in special cases. Harvesting with mechanical equipment is not allowed (see Vegetation Element for details).	Collection of plant parts, fruits, nuts, blossoms, or other plant products will be allowed by permit. Special stiuplations will be required for commercial harvesting. Removal of whole plants (live trees excepted), live and dead, allowed by permit. Harvesting with mechanical equipment is not allowed (see Vegetation Element for details).	Non-commercial and commercial collecting of live whole plants same as Class L. Collection of live plant parts same as Class L, plus harvesting with the use of mechanical equipment and chemicals allowed by permit for arid land crops should these prove to be economically feasible. The cutting of live trees, or any part thereof, is not allowed under any class.	
11. LAND TENURE ADJUSTMENT	Lands will be acquired, disposed of, or exchanged in accordance with FLPMA and other applicable Federal laws and regulations, to assure more efficient management of the public lands and to reduce conflicts with other public and private landowners to provide more consistency and logic in desertwide land use patterns.			
12. LIVESTOCK GRAZING	Grazing will be allowed subject to limitations to preserve wilderness characteristics and the protection of sensitive resources, except that existing grazing will only be subject to the protection of sensitive resources.	Grazing will be allowed subject to the protection of sensitive resources.		

(continued)	MULTIPLE USE CLASS C Controlled Use	MULTIPLE USE CLASS L Limited Use	MULTIPLE USE CLASS M Moderate Use	MULTIPLE USE CLASS I Intensive Use
Livestock Grazing (continued)	Major support facilities, such as permanent corrals, loading chutes, and significant water development, will not be allowed except for existing facilities pursuant to valid existing leases, licenses, and permits. Maintenance of such facilities will be controlled to prevent unnecessary or undue degradation of wilderness values.	Support facilities such as corrals, loading chutes, water developments, and other facilities, permanent or temporary, will be allowed consistent with protection of sensitive resources.	Support facilities such as corrals, loading chutes, water developments, and other facilities, permanent or temporary, will be allowed.	
	Manipulation of vegetation by chemical or mechanical means will not be allowed.	Manipulation of vegetation by chemical or mechanical means will not be allowed.	Vegetation manipulations will be allowed and may be designed, developed, and managed for intensive livestock use.	
13. MINERAL EXPLORATION AND DEVELOPMENT	New mineral permits, leases and material sales contracts will not be issued. Existing mineral leases and material sale contracts may continue as authorized by law pursuant to operational plans to prevent degradation of the lands and wilderness values. At present, new mining claim locations would be prohibited after 12/31/83. However, in providing legislation designating wilderness areas, Congress may permit such actions to take place in specific, designated locations. Valid existing rights may continue as authorized by law pursuant to operational plants submitted in accordance with 43 CFR 3809.	Mineral permits, leases, and material sales contracts are allowed subject to compliance with applicable laws and regulations. Prior to issuing any mineral leases an environmental impact statement will be prepared on the proposed leasing action. Intensive mitigation measures will be required to protect sensitive scenic, ecological, wildlife, vegetative, and cultural values. Locations of mining claims are non-discretionary. Operations on mining claims are subject to the regulations in 43 CFR Section 3809, when final, and applicable State and local law (see GEM Element). BLM will review plans of operation for potential impacts on sensitive resources identified for land in this class. An EIS will be prepared unless the proposed operation will not significantly affect the quality of the human environment. This conclusion, if found to exist, will be prepared as a Finding of No Significant impact by the District Manager and appropriately published.	Mineral exploration and development activities are generally compatible with other actions allowed in this class, subject to adequate mitigation of impacts on critical or sensitive resources or values.	

<table>
<tr><th>(continued)</th><th>MULTIPLE USE CLASS C
Controlled Use</th><th>MULTIPLE USE CLASS L
Limited Use</th><th>MULTIPLE USE CLASS M
Moderate Use</th><th>MULTIPLE USE CLASS I
Intensive Use</th></tr>
<tr><td>Mineral Exploration and Dev. (continued)</td><td colspan="2">Prior to any significant surface-disturbing prospecting or exploratory activity for mineral resources, the prospective user will submit to the BLM authorized officer managing the area or to the U.S. Geological Survey, as appropriate, a plan of the proposed operation and reclamation. Mining plans of operation will be treated under 43 CFR Section 3809. All other plans of operations will be treated under the joint BLM-USGS procedures and other applicable regulations.</td><td colspan="2">Development and reclamation plans must be filed with BLM or USGS, as appropriate, prior to undertaking development. An environmental assessment will be prepared on all plans of operations for locatable, leasable, and saleable minerals.</td></tr>
<tr><td rowspan="2">- Sand and Gravel Extraction</td><td rowspan="2">Not permitted.</td><td colspan="3">Continued use of existing areas of sand and gravel extraction is allowed subject to permit from authorized officer.</td></tr>
<tr><td>New extraction areas will be considered after completion of an EIS.</td><td colspan="2">New extraction areas are allowed subject to an EA.</td></tr>
<tr><td rowspan="5">14. MOTORIZED VEHICLE ACCESS / TRANSPORTATION</td><td>Motorized vehicle use is generally not allowed unless provided for in individual wilderness legislation and management plans or if necessary to serve valid existing rights, and for emergency use for public safety, or protection of wilderness values.</td><td>New roads and ways may be developed under right-of-way grants or pursuant to regulations or approved plans of operations.
Motorized vehicle use is allowed on approved routes of travel.
Vehicle use on some major dunes and dry lake beds may be allowed (See Motorized Vehicle Access Element).
Periodic or seasonal closure of approved roads, ways, and washes may be required.</td><td>Motorized vehicle use will be allowed on existing routes of travel unless designated closed by the authorized officer. New routes may be allowed upon approval of the authorized officer.</td><td>Same as Class M. In addition, the vehicle open areas are available for unrestricted vehicle access (see Recreation Element).</td></tr>
<tr><td colspan="4">Compliance with Executive Orders 11644 and 11989 as applied to motorized vehicle access will be assured.</td></tr>
<tr><td colspan="4">Trails are open for non-vehicular use and new trails for non-motorized access may be allowed.</td></tr>
<tr><td>No new railroads and trams will be allowed. Existing railroads and trams may be operated and maintained subject to non-impairment of wilderness values.</td><td>Railroads and trams will be allowed to serve authorized uses if no other viable alternative is possible.</td><td colspan="2">Railroads and trams will be allowed.</td></tr>
<tr><td>Aircraft facilities are not allowed.</td><td>Temporary landing strips may be allowed by permit.</td><td colspan="2">Airports and landing strips will be allowed by lease subject to conformance with county or regional airport plans and FAA and DOD approval.</td></tr>
</table>

(continued)	MULTIPLE USE CLASS C Controlled Use	MULTIPLE USE CLASS L Limited Use	MULTIPLE USE CLASS M Moderate Use	MULTIPLE USE CLASS I Intensive Use
15. RECREATION	This class is suitable for nonmechanized types of recreational experience which generally involves low to very low user densities. Recreational opportunities provided include, but are not limited to, the following characteristic activities: · backpacking · primitive, unimproved site camping · hiking · horseback riding · nature study and observation · photography and painting · rockclimbing · spelunking · rockhounding	This class is suitable for recreation which generally involves low to moderate user densities. Recreational opportunities include those permitted in Class C plus: · sand-sailing on dry lakes · non-competitive vehicle touring and events on approved routes of travel. All organized vehicle events required a permit specifying the condition of use; these conditions will include, but are not limited to: · approved routes · no pitting, start, finish or spectator areas	This class is suitable for a wide range of recreation activities which may involve moderate to high user densities. Recreational opportunities include those permitted in Class L. In addition to organized motorized vehicle events on approved routes of travel, pit, start, and finish areas may be designated by the authorized officer.	This class is suitable for recreational activities which generally involve high user densities. A wide array of recreational opportunities will be found in this class. Off-road vehicle free play and competitive events will be allowed where approved in open areas. Uses permitted are the same as Class M; in addition, motorized vehicle free play is allowed in areas designated open in the Recreation Element; all aspects of competitive events will be permitted except where specific mitigations are stipulated by the authorized officer.
	Permanent or temporary facilities for resource protection and public health and safety may be allowed at the discretion of the authorized officer in accordance with approved wilderness management plans.		Permanent or temporary facilities for resource protection and public health and	
16. WASTE DISPOSAL	Waste disposal sites will not be allowed in this class.	Hazardous waste disposal will not be allowed. Non-hazardous waste disposal will not be allowed. Existing waste disposal sites will be phased out.	Public lands managed by BLM may not be used for hazardous waste disposal. Where locations suitable for such disposal are found on BLM-managed lands, consideration will be given to transfer of such sites to other ownership for this use. Non-hazardous waste disposal sites may be allowed.	
17. WILDLIFE SPECIES AND HABITAT **a) Rare, Threatened and Endangered species (both State and Federal)**	All State and federally listed species and their critical habitat will be fully protected. Actions which may affect or jeopardize the continued existence of federally listed species will require consultation with the U.S. Fish and Wildlife Service.			
b) Sensitive species	Identified sensitive species will be given protection in management decisions consistent with wilderness values and BLM policies.	Identified species will be given protection in management decisions consistent with BLM policies.		
c) Predator and Pest Control	Predator and pest control will not be allowed except to alleviate public health hazards or protect endangered species.	Control of depredating wildlife and pests will be allowed in accordance with existing State and Federal laws.		

(continued	MULTIPLE USE CLASS C Controlled Use	MULTIPLE USE CLASS L Limited Use	MULTIPLE USE CLASS M Moderate Use	MULTIPLE USE CLASS I Intensive Use
Wildlife Species and Habitat (continued)				
d) Habitat Manipulation	Project to improve wildlife habitat will be allowed subject to environmental assessment. Chemical and mechanical vegetation manipulation not allowed.		Same as Class L, except that chemical and mechanical vegetation manipulation may be allowed.	
e) Reintroduction or introduction of established Exotic species	Reintroduction of native species is allowed.	Reintroduction or introduction of native species or established exotic species is allowed.		
18. WETLAND / RIPARIAN AREAS	Wetland/Riparian areas will be considered in all proposed land use actions. Steps will be taken to provide that these unique characteristics and ecological requirements are managed in accordance with Executive Order 11990, Protection of Wetlands (42 CFR 26951), legislative and Secretarial direction and BLM Manual 6740, Wetland-Riparian Area Protection and Management, 10/1/79, as outlined in the Vegetation Element.			
19. WILD HORSES AND BURROS	Populations of wild and free-roaming horses and burros will be maintained in accordance with the Wild Horse and Burro Act of 1971 but will be subject to controls to protect sensitive resources as provided for in management plans for wilderness areas. (See Wild Horse and Burro Element.)	Populations of wild and free-roaming horses and burros will be maintained in healthy, stable herds, in accordance with the Wild Horse and Burro Act of 1971, but will be subject to controls to protect sensitive resources. (See Wild Horse and Burro Element.)		



Nolina wolfii
(east) Kingston Range

Plan Elements

III

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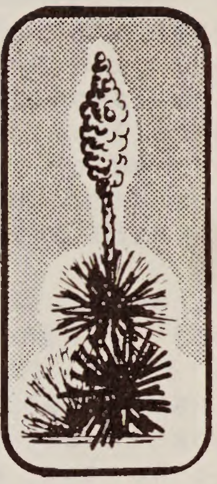

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III. Plan Elements

INTRODUCTION

As described in the previous section, multiple-use class designations and resource management guidelines for those designations were developed as the primary component in designing Plan direction. The second component is the plan element, which provides more specific application of the multiple-use class guidelines for a specific resource or activity about which the public has expressed significant concern.

After a geographic area has been assigned a multiple-use class designation, a number of types and levels of use, consistent with the guidelines may be allowed within that area. However, uses may conflict and such conflicts, as the major issues of this Plan, are addressed in 12 Plan Elements:

1. Cultural Resources
2. Native American Values
3. Wildlife
4. Vegetation
5. Wilderness
6. Wild Horses and Burros
7. Livestock Grazing
8. Recreation
9. Motorized Vehicle Access
10. Geology-Energy-Mineral Resources
11. Energy Production and Utility Corridors
12. Land Tenure Adjustment

Each of the plan elements provides a desertwide perspective of the planning decisions for one major resource or issue of public concern. Each element also provides more specific application, or interpretation, of multiple-use class guidelines for a given resource and its associated activities.

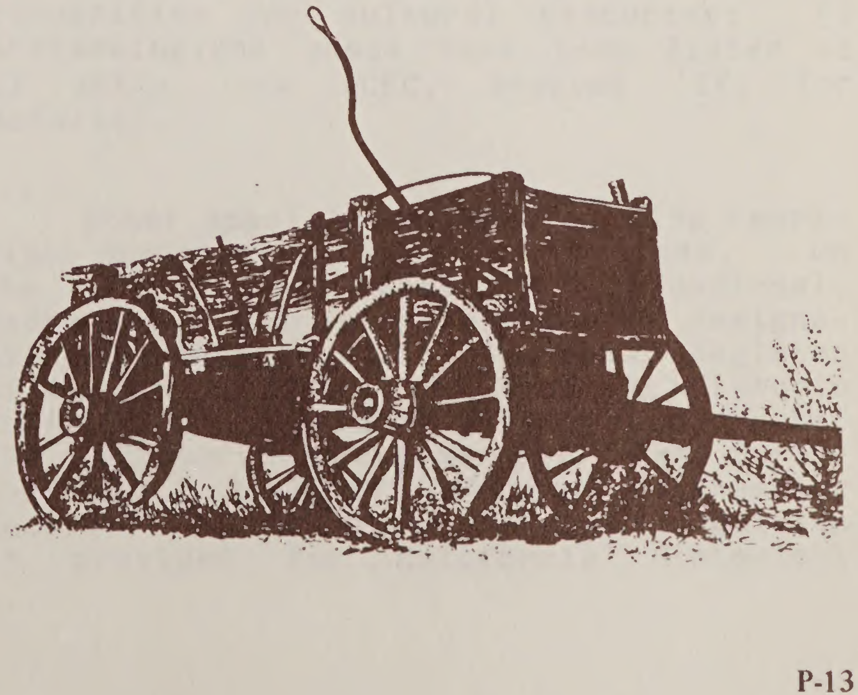
Within each multiple-use class designation residual conflicts will occur naturally, although they are most limited in Class C -- the "Controlled Use" Class -- with its dedication to wilderness characteristics and values. The conflicts increase, however, in a Class L -- "Limited Use" -- designation, where judgment is called for in allowing consumptive uses up to the point that sensitive natural and cultural values might not impaired. Class M -- the "Moderate Use" Class -- calls for subsequent tradeoffs between a number of acceptable uses. Even Class I -- "Intensive Use" -- designed to permit intensive and single uses, is still open to negotiation between those uses.

Many uses in a given area will be mutually exclusive, and require selective decisions be made for that area. The resolution of these conflicts and tradeoffs between and within varying uses are fundamental to multiple-use management. The task of the plan element, therefore, is to identify existing or possible conflicts and to assist the manager in resolution.

In reality, the plan element has a more difficult job in multiple use land management than simply summing up the effect of multiple-use class allocations. It must try to resolve residual conflicts under broader guidelines, or set up procedures for resolving conflicts as they are identified in implementation of the Plan.

The Plan itself must provide general, regional guidance for management of the public lands in the CDCA for at least a 20-year period. The Plan provides a management framework for subsequent plans and actions for specific resources and uses, for subsequent development of site-specific programs or projects and for repsonse to future specific land use requests.

Each of the plan element sections has been subdivided into three areas of interest and responsibility: Goals for that element, Actions Proposed for that element under this Plan, and Implementation of the Plan as it would affect that element. In addition, many of the plan element sections are accompanied by tables or maps which quantify or locate areas of specific concern to that element.



A. Cultural Resource Element

FINDING

Prehistoric and historic remains within the California Desert are being depleted at a rate which approaches 1 percent per year. These remains represent a national treasure with importance to the public, scientists, Native Americans, and others. Preservation and protection or proper data recovery is essential.

ELEMENT OUTLINE

1. GOALS
2. ACTIONS PROPOSED
   a. Recognition
   b. Preservation - Protection
   c. Monitoring
   d. Inventory
   e. Mitigation
   f. Research
   g. Review - Coordination
3. IMPLEMENTATION

1. GOALS

The general goals of the Cultural Resource Element are to:

a. Protect and preserve representative samples of the full array of the CDCA's cultural and paleontological resources for the benefit of scientific and socio-cultural use by present and future generations;

b. Ensure that cultural resources are given full consideration in land-use planning and management decisions;

c. Manage cultural resources so that their scientific and socio-cultural values are maintained and enhanced;

d. Ensure that the Bureau's activities avoid inadvertent damage to cultural resources; and

e. Achieve proper data recovery where adverse impacts cannot be avoided.

2. ACTIONS PROPOSED

Because cultural and paleontological resources are susceptible to unintentional damage and destruction by activities such as mining and vehicle use, as well as by intentional vandalism and looting, their protection is difficult to secure. Disclosure of the locations of sensitive cultural resources before protective measures are undertaken increases the risk of damage and destruction. Therefore, only designated cultural resource ACECs are shown on the maps in the Proposed Plan.

Paleontological resources, including both vertebrate and invertebrate fossils, represent a sensitive, non-renewable resource subject to a wide range of potential impacts. Paleontological resources within the CDCA will be managed to maximize their protection, systematic and scientific material recovery and the development of educational and interpretative programs.

Nearly 500 sensitive/significant cultural resource areas (locations varying in size from 0.5 square miles to 94 square miles) were identified during the planning process. Significant historic and prehistoric road and trail systems and areas of potential Early Man sites also were identified. To achieve the goals of the Cultural Resources Element, seven basic actions are proposed: (1) Recognition: ACEC and other special systems designations; (2) Preservation and protection: Cultural Resource Management Plans, environmental awareness/education, surveillance, stabilization, restoration, and road designation; (3) Monitoring; (4) Inventory; (5) Mitigation Plans; (6) Research; (7) Review-Coordination. Each of these are described below:

a. Recognition

Special designations provide formal recognition for cultural resources: 52 archaeological areas have been listed as 47 ACECs (see ACEC, Section IV, for details).

Other special designations also recognize prehistoric-historic resources. On the Federal level there are Congressional, Secretarial and inter-Secretarial designations including: (1) National Register of Historic Places, (2) National Historic Trails, (3) National Historic Landmarks, (4) Historic American Buildings Survey and (5) Historic American Engineering Record. On the State level, recognition is provided for California Historical

Landmarks and California Points of Historical Interest. At the local level various historical societies acknowledge significant cultural areas. Research Natural Area is a BLM designation which has been applied to a few areas where the potential for paleoenvironmental data which can be related to archaeological values is high (Appendix VII).

These special designations are not necessarily mutually exclusive. For example, all National Historic Landmarks are also listed on the National Register of Historic Places.

b. Preservation - Protection

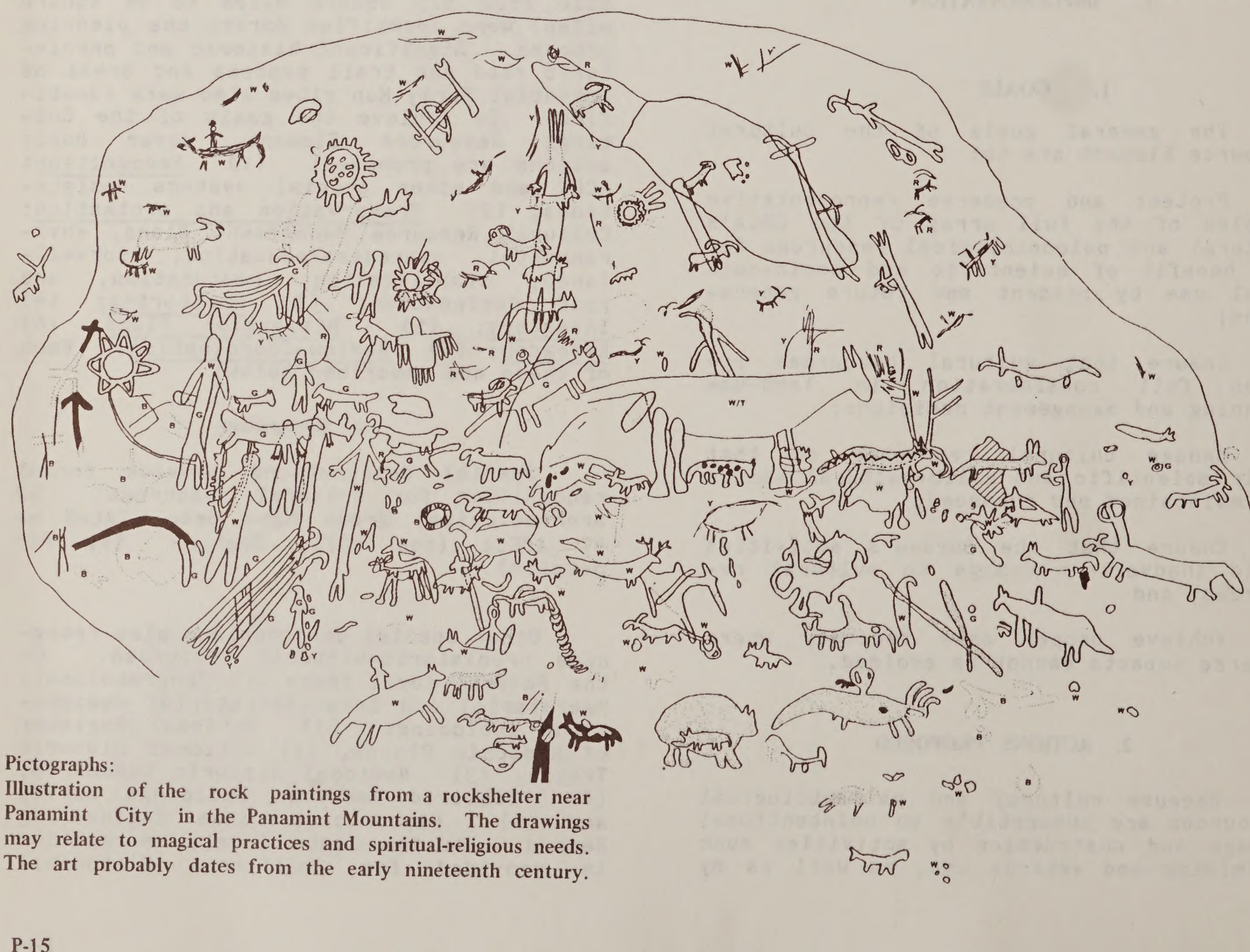
Protection and preservation of cultural resources will be achieved through a variety of management tools. These include: management plans for cultural resources and other values, stabilization, surveillance, vehicle route designation, and environmental education/awareness.

As mentioned above, and in the ACEC section of this Plan, ACEC management prescriptions would direct the construction of activity plans which detail the protection and mitigation measures necessary for preservation of cultural resources within ACECs.

When possible, cultural resources preservation and protection measures will be included in other types of activity plans, especially Wilderness Management Plans and Recreation Management Plans. In addition, Cultural Resource Management Plans (CRMPs) would be prepared for areas containing sensitive-significant cultural resources where special management is warranted. For the purposes of this element, these areas have been termed "Prehistoric-Historic Resource Areas."

Prehistoric-Historic Resource Areas include all archaeological values in small areas and the important associated environments related to past human use and occupation. Prehistoric-Historic Preservation Areas will provide opportunities for continuing archaeological research and education while allowing in cases for the public interpretation of cultural resources. In some instances these areas would provide a data bank of archaeological remains for future research. Although the management of these areas may limit other uses, it will be consistent with the multiple-use class guidelines. Prehistoric-Historic Resource Areas will be subdivided, when appropriate, into two zones:

1. Public Interpretive-use Zone: Within the larger Prehistoric-Historic Resource Areas, zones for facilities such as access



Pictographs:
Illustration of the rock paintings from a rockshelter near Panamint City in the Panamint Mountains. The drawings may relate to magical practices and spiritual-religious needs. The art probably dates from the early nineteenth century.

routes, interpretive displays, trailheads, and public contact stations may be established. These zones would be managed in conjunction with the Visitor Services Program (see Recreation Element).

2. Prehistoric-Historic Preservation Zone: In these zones, cultural resources would be essentially reserved or placed in a "data bank" for use by future scientists with more sophisticated investigative techniques. Access may be controlled by the use of a permit system. In Class C, these measures would be developed in conjunction with the Wilderness Management Plans (see Wilderness Element). Cultural resources research would only be allowed where danger to the resource is apparent or the research is deemed highly important. Such zones would be reviewed periodically, at least every five years.

Prehistoric-Historic Resource Areas, including Public Interpretive Use Zones and Prehistoric-Historic Preservation Zones, are listed in Appendix VII.

Cultural Resource Management Plans would also be prepared for sensitive/significant cultural resources in Classes M and I where management prescriptions do not conflict with the multiple-use class guidelines.

STABILIZATION-RESTORATION

ACEC management prescriptions, Cultural Resource Management Plans, Mitigation Plans, and other resource management plans which address cultural resources will contain descriptions of the methods of stabilization or restoration to be applied when appropriate.

SURVEILLANCE

Surveillance of sensitive/significant cultural resources will be an ongoing program involving rangers, visitor services personnel, archaeologists and historians, and volunteers. Surveillance will provide a form of protection by preparing for contacts with Desert users about the importance and fragility of cultural resources. Through surveillance, data would be gathered on the condition and use of cultural resources. (See the Monitoring section of this element and the Recreation Element for additional details.)

ENVIRONMENTAL AWARENESS/EDUCATION

Under the Recreation Element, a program of public interpretation and education and environmental awareness will be developed. Cultural resources will be given equal footing with other resources in this program. Educationally-oriented brochures, pamphlets, monographs, and other works of a popular and technical nature emphasizing the relevance, fragility, and other values of cultural resources will be designed and distributed. Other forms of interpretation and education will be employed on the ground, especially in the Public Interpretive Use Zones and at other sites as appropriate. (See the Recreation Element for further discussion of this program).

VEHICLE ROUTE APPROVAL

Vehicle route approval in Class L and closures in Class M are other tools for cultural resources protection. Cultural resource data will be used during the route approval process to help minimize or eliminate adverse impacts to cultural resources occurring from access and vehicle use (see Motorized Vehicle Access Element).

c. Monitoring

Cultural resource locations will be monitored to determine the types and extent of impacts to archaeological sites caused by multiple-use class designation, as well as impacts from consumptive uses and natural processes. This will provide baseline data on resource condition and trend and will be used to evaluate the effectiveness of general planning and implementation. Monitoring systems would also be developed as part of Cultural Resource Management Plans to evaluate their effectiveness. Measures to be employed in monitoring site disturbance will include subjective evaluations of site condition (through surveillance by rangers, archaeologists, and other staff members and the concerned public) and more objective measures of the number, condition, size, types, etc. of artifacts and features.

d. Inventory

As only about five percent of the CDCA has been inventoried for cultural resources, additional inventory is essential to improve knowledge and management of the cultural resources of the desert. Field inventories for cultural resources in other than project specific cases will be undertaken primarily within Classes M and I. These field assessments will focus on areas little known archaeologically where recreation and other uses are concentrated. Otherwise, inventory will be undertaken in poorly understood areas of the Desert, within any class and/ or in areas where secondary use impacts can be expected to be the highest based on monitoring studies. Contingent on budget allocations, 2,000 acres or more per resource area will be inventoried each year. Volunteers will be used where feasible.

e. Mitigation

When protection/preservation of cultural resources cannot be achieved, mitigation through archaeological data recovery or other means will be undertaken as developed through mitigation plans. These plans will detail steps necessary to recover the resources or otherwise ameliorate the impacts. These plans will be completed and implemented by the cultural resource specialists on a priority basis subject to the resources available from the BLM program or programs (activities) involved. Also, they will establish a clear statement of the mitigation procedures and levels to be followed. Mitigation will be employed primarily in Classes M and I where cultural resource protection measures cannot override the multiple-use class guidelines. A list of priority areas for mitigation planning is presented in Appendix VII.

f. Research

The Bureau will encourage and support well-directed anthropological and historical research, especially in high impact risk areas, as in Classes M and I and elsewhere where management goals will be well served. As archaeological and historical knowledge of the Desert is still so limited, additional research is essential to develop a better understanding of prehistory and history of the CDCA.

g. Review - Coordination

In all cases 36 CFR 800 procedures relative to the National Historic Preservation Act of 1966 (as amended) will be followed persuant to the Programmatic Memorandum of Agreement between the Bureau of Land Management, the California State Historic Preservation Officer and the Advisory Council on Historic Preservation (Appendix VII).

Peer review of prehistoric-historic undertakings and reports (both internal and contracted) will be an ongoing Bureau activity as the Desert Plan is implemented. The BLM would coordinate with the Archaeological Conservancy in the preservation of select archaeological sites and the acquisition of endangered cultural properties.

3. IMPLEMENTATION

The Programmatic Memorandum of Agreement covering the implementation of the Desert Plan between the Bureau of Land Management, the California State Historic Preservation Officer and the National Advisory Council on Historic Preservation outlines the implementation of the Cultural Resources Element. Specific implementation actions will include:

a. Specific management prescriptions for cultural resource ACECs will be completed and implemented on a priority basis following approval of the California Desert Plan. Some of the management prescriptions will be immediately implementable (e.g, patrol, field reconnaissance); others will be implementable as the proscriptions are finalized (within two years of Plan adoption).

b. Formal nominations or eligibility determinations requests for potential National Register of Historic Places properties will be an ongoing process. At least two properties per CDCA Resource Area office will be submitted annually. The documentation for these properties will rely primarily on overviews, special studies, site records and other material on file with the BLM and other agencies or institutions. As a first priority, properties submitted for National Register eligibility determinations or formal nominations will be ACECs and those with the highest impact risk, particularly those in Classes M and I.

c. Cultural resources management will be included whenever feasible, in other activity plans (e.g., Wilderness Management Plans, Recreation Management Plans). Cultural resources will be given the same consideration as other resources values.

d. Cultural Resource Management Plans or mitigation plans will be completed on sensitive/significant cultural resources (as identified in Appendix VII) on a priority basis based on the potential for adverse impacts to cultural resources or the likelihood of successful protection/preservation.

e. Cultural resources data will be used in the vehicle route approval process to help minimize impacts to cultural resources.

f. Monitoring of cultural resources site integrity and impact trends will be undertaken as part of the desert-wide monitoring program. Plan implementation effectiveness will be assessed. Specific information pertaining to actual monitoring techniques, frequency of visitation, the type of artifacts and features to be monitored and the approximate locations to be monitored and the activities to be evaluated are discussed in Appendix VII.

g. Cultural resources inventory will be conducted annually depending on funding and personnel constraints. Discovery of currently unknown cultural resources may lead to the identification of additional ACECs, the designations of additional areas for cultural resource management plans or mitigation plans, and other special area designations and/or a change in multiple-use class.

h. Volunteers will be used in aspects of cultural resource work upon approval of a Bureauwide volunteer program. To the extent feasible, volunteers will be used in inventory, construction of protective devices, monitoring, surveillance, public interpretation, and in other tasks as appropriate.

i. Support will be provided for well-directed anthropological and historical research by processing antiquity permit applications and providing funding or supplies where appropriate. The Bureau will encourage research studies, especially in high-impact risk zones, and elsewhere where management goals would be well served.

Petroglyphs - Surprise Canyon

Saline Valley - "Hogan's Knolls"

B. Native American Element

FINDING

Prominent features of the CDCA landscape, wildlife species, prehistoric and historic sites of occupation, worship and domestic activities and many plant and mineral resources are of traditional cultural value in the lives of the desert's Native People. In some cases these resources have a religious value. Specific sites or regions may be important because of their role in ritual or the mythic origin of an ethnic group. These values should be considered in all CDCA land use and management decisions.

ELEMENT OUTLINE

1. GOALS
2. ACTIONS PROPOSED
   a. Response to Policy and Law
   b. Response to Issues
   c. Management Tools
3. IMPLEMENTATION

1. GOALS

The Native American Element addresses both the contemporary and traditional concerns of Native Americans and organized Tribal governments. The plan inventory has attempted to identify the full spectrum of Native American cultural values. The element deals with these values in two distinct contexts: 1) those values associated with traditional heritage and religious concerns; 2) values and concerns which arise from the long-range goals and planning efforts of reservation governments in, or adjacent to, the California Desert Conservation Area (CDCA).

The goals of this element are to:

a. Achieve the full consideration of Native American values in all land use and management decisions. The BLM will seek to manage and protect these values, wherever possible and feasible. Guidance is provided through this element to insure that this management is consistent not only with the applicable legislation, but also with the concerns and cultural values of the appropriate Native American group(s).

b. Provide guidance for contact and consultation with Tribal organizations and reservation governments as specified in the Memorandum of Agreement between BLM and the California State Native American Heritage Commission (NAHC). Inconsistencies in the manner and degree of involvement of these organizations in projects adjacent to Federal lands has often reflected an absence of effective channels of communication between the Federal Government and representative Native American government organizations. This element seeks to correct these inadequacies within the CDCA by: 1) identifying regional Tribal governments, associations and inter-Tribal government organizations; 2) identifying the National Environmental Policy Act notice responsibilities of the BLM and Native American Heritage Commission, relative to the Native American community and setting these forth in a Memorandum of Agreement (Appendix VIII); 3) providing an outline for contact procedures and the identification of "appropriate and informed" Tribal groups.

2. ACTIONS PROPOSED

a. Response to Policy and Law

A number of recent legislative actions guide the degree and type of Native American consultation and involvement in cultural resource management programs.

Recent protection of traditional Native American values has been provided by the American Indian Religious Freedom Act (PL 95-341). The purpose of this statute is to ensure that agency policies and practices are brought into compliance with the constitutional injunction against abridging the free exercise of religion (Task Force Report on PL 95-341).

The Task Force report on PL 95-341 recognizes the special cultural and religious values which many natural and cultural resources hold for traditional Native Americans. The integration of the cultural systems in association with the planning and administration of CDCA public lands will require direct positive actions by the BLM to protect and manage these values as fragile and non-renewable resources.

The rights guaranteed to Native People under existing legislation include access to sites, use and possession of sacred objects and the freedom to worship through ceremonies, and traditional rites.

Specific guidelines and policy have been developed in the course of the Desert Plan Staff analysis and through a Memorandum of Understanding with the Native American Heritage Commission and the California State Office of Historic Preservation (Appendix VIII). These policies and guidelines integrate consideration of Native American socio-cultural values in all program development and implementation.

The confidentiality of Native American input in review of projects on public lands has been given special consideration by the BLM in drafting policy. Specifically, it is the policy under the Bureau's Cultural Resource program that field inventory data are considered privileged and would be released only in agreement with the Indian consultants.

The BLM has adopted guidelines for controlling access to data pertaining to areas of Native American religious or heritage significance. Data on Native American socio-cultural values will be treated as "sensitive", consistent with the policies and procedures outlined in a Memorandum of Understanding between the BLM, NAHC and SHPO (Appendix VIII).

The California Desert has traditionally been the home of many distinct and diverse groups of Native Americans. Dealing simultaneously with the often varied cultural concerns of these groups poses a complex problem in developing a land management strategy, and makes it difficult to sufficiently treat the categories of Native American cultural values outlined in the existing legislation and policy. The procedures for identifying these concerns have been identified in consultation with Native American tribal organizations, elders, the California State Native American Heritage Commission and the State Historic Preservation Office. Final guidelines for contact and consultation procedures have been drafted and appear in the appendices.

b. Response to Issues

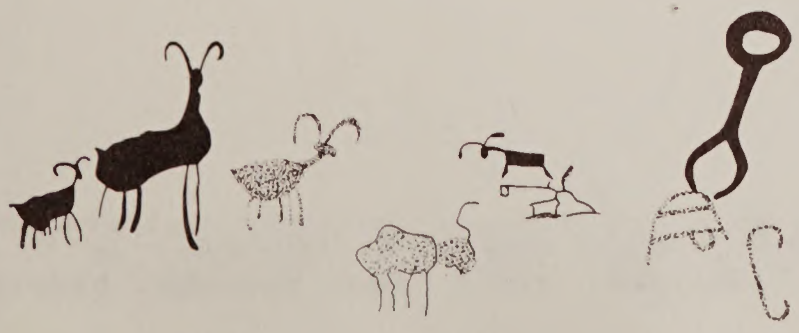
A number of major issues have arisen in the course of the BLM inventory and analysis of Native American concerns. Primary among these are:

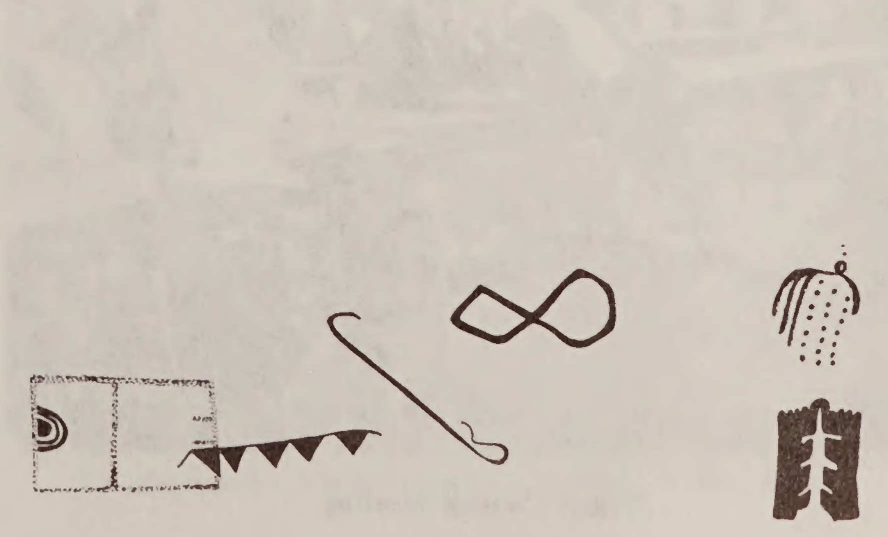
1) Practical problems arise in the identification, protection and/or mitigation of impacts to Native American resources. The accurate evaluation of potential impacts to cultural values can only be made within the cultural context from which those values are derived. Impact evaluations and management guidelines must, therefore, be carefully developed in close coordination with all potentially effected Native American groups in the course of Plan implementation (see Appendix VIII).

2) A primary concern of many reservation governments is the development of guidelines which would insure the input of Tribal government review in the evaluation of any proposed activity which could have effects on Tribal lands. Specific guidelines have been developed to incorporate the formal comments of Tribal governments into the environmental review process of the BLM. These guidelines include not only actions which might effect reservation lands but also activities which could effect the values outlined above (Item 1).

3) Conflicts between Native American cultural values and other activities can produce many difficult management situations, e.g. mining, grazing management programs, wild horse and burro issues, etc. These conflicts can be most effectively identified and resolved through the development of detailed management plans. Criteria and guidelines are proposed in the Desert Plan to insure consistency and the extensive involvement of Native People in these management actions.

4) Many impacts to resources of Native American value are not amenable to mitigation. Desecration or sacrilege of religiously significant sites cannot be mitigated as can many adverse effects on material resources. These often irreversible and substantial potential impacts to cultural values will be carefully considered in all actions of the plan.





c. Management Tools

The Proposed Desert Plan provides a number of tools for the management, protection and enhancement of Native American cultural values and the resources with which they are associated. At the most general level, components of the Multiple-Use Class Guidelines have been drafted to incorporate Native American concerns. Classes C and L provide protective resource management which complement many identified Native American values. These values are also protected under the provisions of Wilderness Study Area interim management.

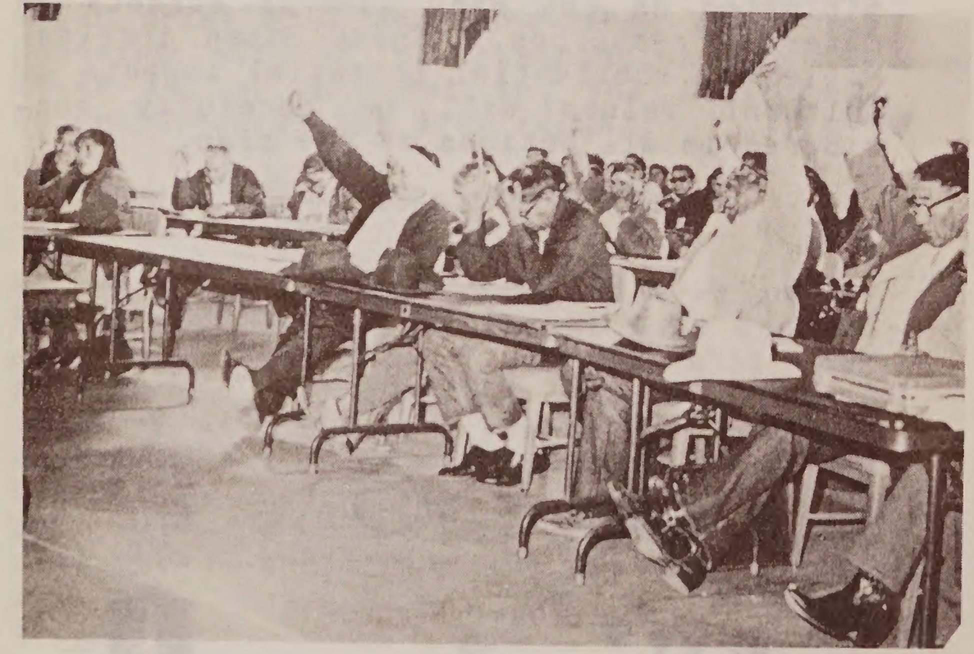
Native American resource concerns have also been directly incorporated in drafting the general guidelines of the Proposed Plan (e.g. plant collection and harvesting) and other Proposed Plan elements such as cultural resources, vegetation, etc. The wilderness and open area review process included the specific treatment of identified resources of Native American value. Regional Native American groups, reservation governments and traditionalists were identified for assistance and coordination in preparing specific management plans during Plan implementation.

Areas of Critical Environmental Concern (ACECs) provide a tool for dealing specifically with sensitive resources of Native American value which are exposed to a high risk of adverse impact. The ACEC designation has been used cautiously in drafting this element due to the risk of impact to the resource which accompanies public disclosure of sensitive values. The ACEC designation was proposed only in small, important areas of value which were fairly well known to the general public and where the ACEC designation was recommended by the appropriate Native American group(s). ACEC activity plans would be developed in close coordination with reservation governments and tribal organizations. The ACEC recommendations associated with this element are discussed in the Areas of Critical Environmental Concern section.(Part IV.A).

Specific design of procedures for managing Native American values has taken place in close coordination with Tribal governments, traditionalists, elders, religious practitioners and agencies of the State of California which share a complementary management responsibility. Guidelines for both the management of heritage values and formal Tribal coordination have been developed in coordination with Native People, the State Native American Heritage Commission and the State Historic Preservation Officer. These guidelines would be consistently applied in BLM land management to incorporate Tribal government participation and Native American cultural values in all resource management activities.

3. IMPLEMENTATION

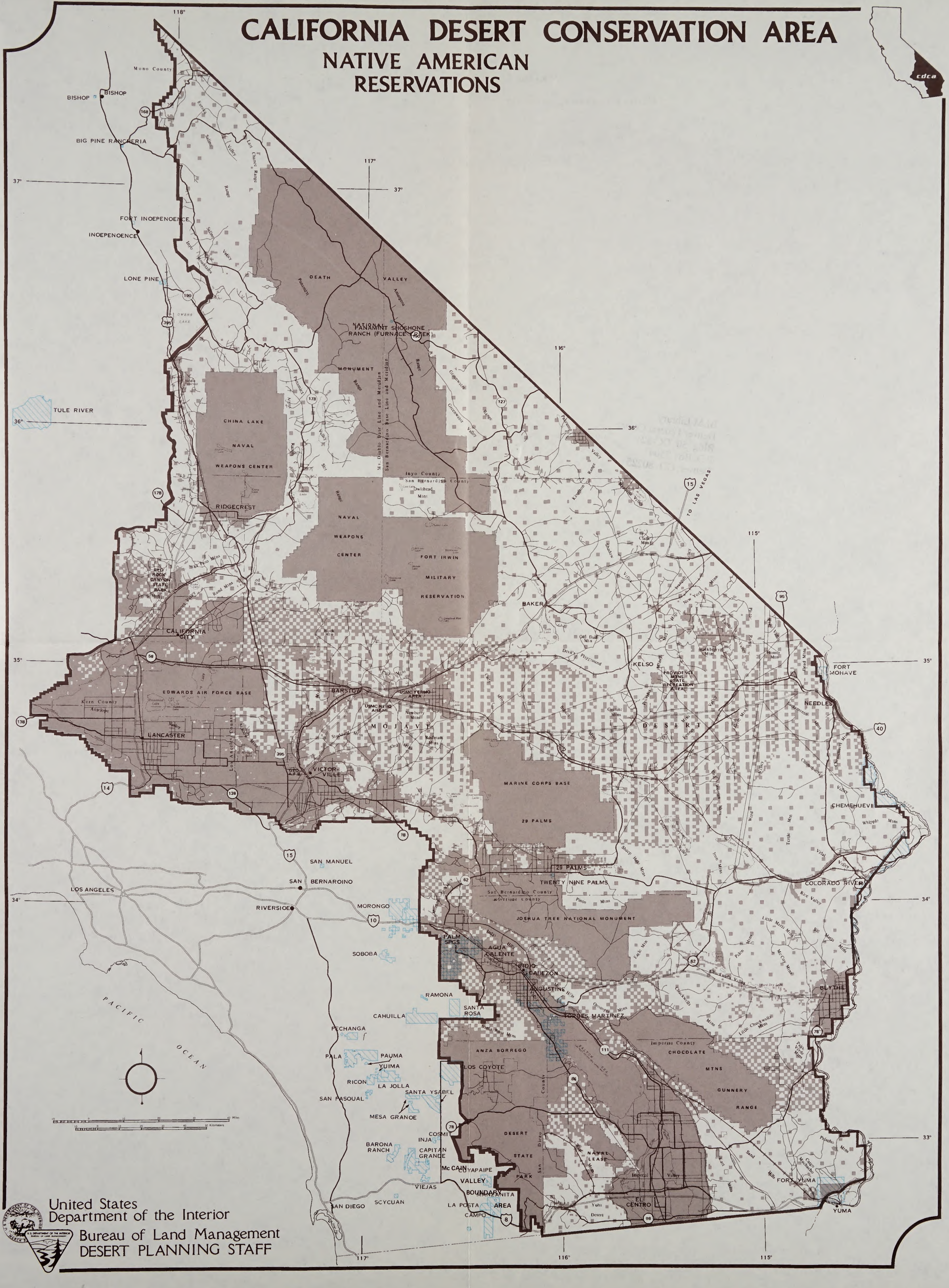
Priorities for implementation of the Native American Element will be directed toward the protection of the most critical and threatened resources of Native American value. Such areas would include the ACECs and areas of extensive, diverse and sensitive cultural values. The WSA areas would also be evaluated in conjunction with the appropriate Native American group(s) to identify potential impacts relative to other management options following Congressional action on wilderness. Through the guidelines provided in this element and the related appendices, the consistent management and protection of Native American values would be included as an integral component of all management actions.



Tribal Council Meeting

CALIFORNIA DESERT CONSERVATION AREA

NATIVE AMERICAN RESERVATIONS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Mono County
BISHOP
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BIG PINE RANCHERIA
FORT INDEPENDENCE
INDEPENDENCE
LONE PINE
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395
TULE RIVER
DEATH VALLEY NATIONAL MONUMENT
PANAMINT SHOSHONE RANCH (FURNACE CREEK)
CHINA LAKE NAVAL WEAPONS CENTER
RIDGECREST
178
127
NAVAL WEAPONS CENTER
FORT IRWIN MILITARY RESERVATION
Inyo County
San Bernardino County
15
TO LAS VEGAS
RED ROCK CANYON STATE PARK
CALIFORNIA CITY
58
BAKER
KELSO
PROVIDENCE MTNS STATE RECREATION AREA
95
FORT MOHAVE
EDWARDS AIR FORCE BASE
Kern County
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LANCASTER
BARSTOW
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USMC NEBO AREA
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VICTORVILLE
MARINE CORPS BASE 29 PALMS
CHEMEHUEVI
18
SAN MANUEL
SAN BERNARDINO
LOS ANGELES
RIVERSIDE
MORONGO
10
62
29 PALMS
TWENTY NINE PALMS
San Bernardino County
Riverside County
JOSHUA TREE NATIONAL MONUMENT
COLORADO RIVER
PALM SPGS
AGUA CALIENTE
SOBOBA
INDIO
CABEZON
AUGUSTINE
TORRES MARTINEZ
BLYTHE
RAMONA
SANTA ROSA
CAHUILLA
PECHANGA
PACIFIC OCEAN
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Imperial County
CHOCOLATE MTNS GUNNERY RANGE
111
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LOS COYOTE
PALA
PAUMA
YUIMA
RICON
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SAN PASQUAL
SANTA YSABEL
MESA GRANDE
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BARONA RANCH
CAPITAN GRANDE
DESERT STATE PARK
NAVAL LEASE
McCAIN VALLEY BOUNDARY AREA
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FORT YUMA
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Kilometers

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Tribal Council Meeting

C. Wildlife Element

FINDING

The California Desert Conservation Area supports over 635 species of vertebrates and thousands of invertebrate organisms in a diversity of wildlife habitats. Immediate management is required to protect unique and sensitive habitats; sensitive, rare, threatened, and endangered species; and representatives of more common desert habitats and ecosystems and the fish and wildlife resources they support.

ELEMENT OUTLINE

1. GOALS
2. ACTIONS PROPOSED
    a. Management Tools
    b. Application
3. IMPLEMENTATION
    a. Schedule and Priorities
    b. Monitoring

1. GOALS

A number of public laws, acts, and executive orders provide direction to the BLM in managing wildlife resources. Some of these are: National Environmental Policy Act of 1969; Endangered Species Act of 1973 (as amended); Sikes Act; Executive Order No. 11514, Protection and Enhancement of Environmental Quality; Executive Orders 11644 and 11979, Off-Road Vehicles on Public Lands; Executive Order 11990, Protection of Wetlands; and Executive Order 11988, Floodplain Management. The BLM has translated applicable parts of these laws, acts, and executive orders into policies and guidance, which are contained within the BLM manual system. Some of the more important BLM manuals providing direction to the wildlife program are: Manual 6840, Threatened and Endangered Wildlife; Manual 6740, Wetland-Riparian Area Protection and Management; and Manual 1608, Supplemental Guidance, California State Supplement to Program Outlook Guides FY 80-84. A more complete discussion of the laws, acts, executive orders, BLM manuals, and policies is found in Appendix IX.

In response to these laws and policies, there are a number of interrelated objectives for wildlife species and habitats. These objectives are to:

a. Manage federally and State-listed species and their habitats to comply with existing legislation and Bureau policies. In brief, the continued existence of these species will not be jeopardized by Bureau actions. Where possible and feasible, populations and habitats will be stabilized and/or improved. The overall objective will be to improve the status of such species so that delisting can occur. Management of these species and their habitats will occur through close coordination with other State and Federal agencies.

b. Give certain species, designated sensitive by the BLM, special consideration and attention in the planning process because of their present condition and status. The overall objective would be to manage these species and their habitats so as to minimize the potential for Federal or State listing.

c. Consider the habitat of all fish and wildlife in implementing the Plan, primarily through adherence and development of objectives dealing with habitats and ecosystems (see objectives d, e, and f). Because of space allowances in the Plan and EIS, as well as convenience, certain species and habitats will be highlighted in discussions. Such species include those of official Federal and State lists, species with high public visibility (raptors, game birds, some fur bearers, commercially valuable reptiles), and species which are recognized as indicators of habitat condition.

d. Manage representative habitats using a holistic approach. Each habitat will be large enough and managed in such a way as to retain viability and integrity of the natural systems.

e. Give habitats unique to the CDCA special management consideration and to manage them so as to maintain unique biological characteristics.

f. Manage sensitive habitats using a holistic, systems-type approach. Sensitive habitats are defined much like "sensitive species." These habitats are of very limited size within the CDCA and are especially fragile or susceptible to impacts. Examples of kinds of sensitive habitats are: riparian areas, wetlands, sand dunes, relict and island habitats, washes (such as catclaw-blackbanded rabbitbrush and ironwood washes), and important ecotonal zones between the different major ecosystems and deserts. Such habitats will be highlighted in the Plan.

2. ACTIONS PROPOSED

a. Management Tools

Several management tools are available for use in meeting the objectives of the Wildlife Element of the Plan. The primary active wildlife management tools used in the Plan are Areas of Critical Environmental Concern (ACEC) and Habitat Management Plans (HMP). Management prescriptions for ACECs identified for wildlife resources will include aggressive management actions to halt and reverse declining trends and to ensure the long-term maintenance of these critical fish and wildlife resources. ACEC management prescriptions will receive the highest priority in the BLM for preparation, implementation, and funding (see Implementation Section of this element for policies and schedules).

HMPs are detailed plans developed specifically for wildlife habitats or species which require intensive, active management programs. In the Proposed Desert Plan, HMPs can be placed in any multiple-use class. Multiple-use class guidelines set the limits for the recommendations that can be included in an HMP. HMPs would be of lower priority than ACECs and would compete with other activity and use plans for preparation and implementation.

Some fish and wildlife resources requiring special management attention can be protected in Multiple-Use Class L through the number and location of routes approved. Route approval may also be part of an ACEC management prescription or an HMP decided at the time the management plans are prepared.

A fourth tool used in the Plan is Special Attention areas (SA). This tool highlights habitats and species known to be important for special consideration in the environmental assessment process for any kind of project.

Wilderness Management Plans were identified as an "active" wildlife management tool in the Draft Plan Alternatives, but, they do not include sufficient detail to meet wildlife management needs. More detailed Wilderness Management Plans will not be prepared until the President and Congress make final decisions on wilderness.

Two additional designations that are used in the Wildlife Element are Research Natural Area (RNA) and Sikes Act Agreement. Research Natural Areas have been proposed in a few locations where research and education would be one of the primary uses (See Special Areas Part IV.B). Sikes Act Agreements are cooperative agreements between the BLM and the California Department of Fish and Game for joint development and implementation of an HMP. A preliminary list of HMPs where Sikes Act Agreements are recommended is included in Table WL-1, following the element text. Changes in this list may occur as individual HMPs are prepared and management needs become more precisely known.

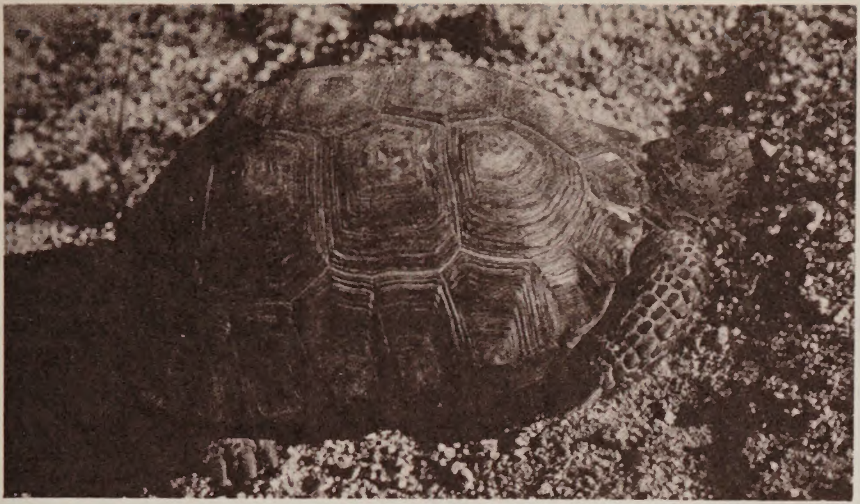
Accomplishment of objectives in the Wildlife Element of the Plan also will be aided to varying degrees by stipulations found in other elements and the multiple-use class guidelines. For example, wetland guidelines for the multiple-use classes protect valuable wetland habitat. Various measures in the Livestock Grazing and Wild Horse/Burro Elements have been designed with the intention of aiding fish and wildlife resources. Stipulations have also been included in other elements.

b. Application

The management actions proposed in the Wildlife Element of the Plan are designed to fulfill the habitats/ecosystems and species management objectives described previously. Multiple-use class guidelines and specific actions regarding wildlife in other resource elements provide a framework for management. Within this framework the Plan proposes ACECs, HMPs, and route approvals which would enhance representative, unique, and sensitive ecosystems and wildlife habitats as well as sensitive, rare, threatened, and endangered species.

The Wildlife Element identifies 89 special fish and wildlife areas that would receive active habitat management and/or special attention in the environmental assessment process (see Map No. 7, "Proposed Management Areas for Fish and Wildlife," and Table WL-1. The first column on the table also serves as the map key.). Twenty-seven areas have been identified as ACECs solely or partially to protect fish and wildlife resources. HMPs would be prepared for 59 areas. Thirteen of these areas are also ACECs, and four of the HMPs are either already complete or in preparation. Nine areas would be protected by limiting approved routes in Multiple-use Class L. All 89 areas will receive special attention designation.

Several fish and wildlife areas have been identified primarily to protect sensitive, rare, threatened or endangered fish and wildlife species. Other SAs will benefit these species, as well as many representative, unique, and sensitive ecosystems and wildlife habitats. Proposed management of listed species is shown in Table WL-2 of this element. Habitats of these species are generally indicated on



The Desert Tortoise: Active management is proposed to protect the habitat of this species, designated "sensitive" by BLM.

Map No. 8, "Sensitive, Rare, Threatened, and Endangered Wildlife Species," which follows Tables WL-1 and WL-2. Brief descriptions of the occurrence of each sensitive, rare, threatened, and endangered species and the proposed management can be found in Appendix IX.

In addition to the use of HMPs, ACECs, route approvals and SAs, the following general policies help accomplish the objectives of the Wildlife Element of the Plan:

1) The protection afforded federally and State-listed species would remain the same for all multiple-use classes. Any Federal action which may impact either the habitat or individuals of federally listed species must be put into formal consultation with the U.S. Fish and Wildlife Service (FWS). Species officially proposed for listing, as well as those under status review, which may be impacted through a Federal action are dealt with through informal consultation with the FWS.

2) Discovery of previously unknown but significant wildlife values may serve as the basis for initiating the amendment of a multiple-use class designation. Designation of Critical Habitat for a federally listed species may necessitate a change in multiple-use class designation.

3) Protective provisions, stipulations, or objectives for wildlife will be considered in all permits, licenses, activity plans, etc., to avoid or minimize habitat deterioration.

4) HMPs for Critical Habitat of federally listed species will be completed within three years of final listing or acceptance of the final Desert Plan. They will be revised to incorporate formal recovery plans which may be developed.

5) Inventories for State-listed species will be completed within three years of Desert Plan acceptance or final listing of new species by the State. HMPs for State-listed species will be completed within two years following completion of the inventories. Activities impacting State-listed species will be addressed through informal consultations with the California Department of Fish and Game and the environmental assessment process.

6) A sensitive species list will be maintained, and updated whenever data indicate a need for change.

7) Species in the CDCA which are officially proposed for addition to the Federal list of threatened and endangered species will be appended to the BLM sensitive species list immediately following the proposal.

8) Where conditions warrant and where legally possible, all existing water sources and those developed in the future on public lands will include wildlife as a principal use.

9) Wildlife objectives will be included in all Wilderness Management Plans.

3. IMPLEMENTATION

a. Schedule and Priorities

Table WL-1, "Proposed Management for Special Fish and Wildlife Areas," outlines the kinds of actions needed to manage and protect the key wildlife resources and the proposed timeframes for implementation. The success of management and protection is ultimately dependent upon timely implementation, which in turn is dependent upon budget and sufficient qualified personnel.

There are 43 Wilderness Study Areas (WSAs) which have been recommended for designation in the Proposed Plan. During the interim period before Congress decides on their final disposition, these WSAs have the potential for offering high protection to wildlife resources. The high potential for protection is dependent in several areas upon immediate and active management, e.g., burro reductions.

b. Monitoring

A long-term monitoring system to gauge the effectiveness and overall success of the Wildlife Element and the entire Plan is being developed. Many baseline study plots have already been established, i.e., over 100 breeding and winter bird census plots, 27 desert tortoise study plots, etc. (see Appendix IX for a summary of existing study areas). More must be selected to provide adequate coverage. There have been numerous studies during the last decade on impacts of other resource uses on wildlife in the CDCA, such as impacts of off-road vehicles, yucca harvesting, general recreation, and vehicle noise. While these studies provide valuable information for future monitoring, much more is necessary. Examples of baseline studies and research that will become part of the wildlife monitoring system are:

1) The impact of approved access routes, particularly in habitats of officially listed species, sensitive species, and raptors;

2) effectiveness of increased surveillance in controlling vandalism;

3) effects of grazing practices on desert bighorn and desert tortoise and their habitats;

4) effects of burro populations and reductions on species such as the desert bighorn sheep;

5) conditions of fish and wildlife water sources, particularly those used by people, livestock, horses and burros, and mining interests;

6) effects of continued vehicle use on wildlife habitats and populations in areas designated as "open" for vehicle free play;

7) condition and trends for officially listed, sensitive, and certain other species; and

8) effectiveness of HMPs and ACECs in stabilizing or improving populations and habitats for officially listed, sensitive, and certain other species and their habitats.

As part of this Plan, the BLM proposes to study the effects of livestock grazing on desert bighorn sheep in the eastern Mojave Desert (i.e., Kingston, Clark, New York, Providence, Granite, Piute, Woods, Hackberry, Kelso, Old Dad, Ivanpah and Mescal Mountains, Midhills, and Castle Peaks), and to determine 1) the numbers of bighorn sheep in each mountain range, 2) the health, condition, and population trends in each herd, and 3) the effects of livestock grazing on concentration areas, and permanent and seasonal ranges. This study would be initiated as soon as possible and might require 3 to 7 years to complete. If livestock grazing is found to have negative impacts on the bighorn sheep and grazing threatens the health and viability of herds, then changes will be made in grazing allotments so that healthy, viable herds of bighorn can continue to exist in this region.

In general, where other land uses (grazing, vehicle use, intense visitor use) are found to adversely affect officially listed and sensitive species or other significant wildlife resources, action will be taken to remove or reduce impacts.

In addition to the HMPs and ACEC plans shown in Table WL-1, several desert-wide species plans will be developed, particularly for sensitive species with large geographic ranges or wide distribution, e.g., desert tortoise, desert bighorn, and flat-tailed horned lizard.

Studies on animals and their habitats will be closely integrated with baseline monitoring programs for soils, water quality, air quality, vegetation, recreation, and livestock grazing.

Table WL-1

Proposed Management for Special Fish and Wildlife Areas

Map Key	Location	Acres (000)	Special Wildlife Habitat	Federally Listed Species	State Listed Species	BLM Sensitive Species	Other Species	Proposed Wildlife Management Prescription				Other Management Designations		Specific Management Actions Requiring Implementation (1-3 years)						General Long-Term Management Goals				
								ACEC	HMP	RA	SA	RNA	Sikes	Control Vehicle Use	Fence	Remove Exotic Vegetation	Establish Cooperative Agreement with Private Landowner	Increase Surveillance	Restrict Camping and/or Parking	Remove/Reduce Burros/Horses	Land Acquisition in Conjunction with Private Organizations and State Agencies	Changes in Livestock Grazing Practices	Protection of Water Sources	Protect, Stabilize and/or Enhance Fish and Wildlife Resource Values
W-1	Cottonwood Creek	5	X				X				X				X				X					X
W-2	Deep Spring Valley (Shadscale Community)	10	X				X		D		X											X		X
2	Deep Spring Valley Black Toad Habitat	2			X			X	[b]		X		X		X		X					X	X	X
3	Eureka Valley Dunes	23	X				X	X[c]	B		X							X						X
W-3	East Slope Inyo Mountains	64	X				X		B		X		X		X	X				X			X	X
4	Saline Valley (Dunes and Mesquite Marsh)	9	X				X	X[c]	B		X		X		X	X			X	X			X	X
W-4	Hunter-Cottonwood Mountain/Grapevine Canyon (Bighorn Sheep Habitat)	59					X		A		X		X		X				X	X		X	X	X
W-5	Lee Flat (Shadscale Community)	33	X						C		X											X		X
W-6	Panamint Valley Dunes	2	X				X			X	X							X						X
W-7	Black Springs	<1	X								X				X								X	X
6	Darwin Falls/Canyon	6	X				X	X			X			X		X			X	X				X
W-8	Argus Mountains (Bighorn Sheep Habitat)	90			X		X		B[j]		X		X						X	X			X	X
12	Argus Range (Inyo Brown Towhee)	9	X		X		X	X[g]			X				X	X	X		X	X			X	X
W-9	Panamint Lake	4	X							X	X			X					X	X				X
W-10	West Panamint Mountains Canyon	121	X				X		A		X		X				X		X	X			X	X
8	Surprise Canyon	13	X				X	X[d]			X					X	X		X	X			X	X
W-11	Rose Valley (Mohave Ground Squirrel Habitat)	18			X				B		X		X											X
W-12	East Sierra Canyons	88	X				X		A		X		X	X	X		X	X	X			X	X	X
11	Sand Canyon	2	X				X	X[e]			X			X			X	X	X			X		X
W-13	Robber's Roost	3					X				X[f]			X				X	X					X
W-14	Upper Amargosa River	3	X						C		X				X				X	X			X	X
W-15	Shoshone Cave (Whip-scorpion Habitat)	<1					X		A		X													X
W-16	Chicago Valley (Mesquite Thicket)	10	X							X	X								X	X			X	X
W-17	California Valley (Mesquite Thicket)	4	X							X	X								X	X			X	X
13	Amargosa River/Grimshaw Lake	14	X		X		X	X			X			X		X	X	X	X		X	X	X	X
14	Kingston Range	64	X				X	X[c]	B		X		X									X	X	X
18	Salt Creek (Dumont)	3	X					X			X			X		X			X				X	X
W-18	Lone Tree Canyon (Potential "California" Bighorn Sheep Reintroduction Area)	47			X				D		X		X	X			X				X			X
20	Sierra-Mojave-Tehachapi Ecotone	162	X		X		X	X	B		X		X	X			X	X	X			X	X	X
22	Desert Tortoise Research Natural Area	26			X	X		X	O		X		X					X			X			X
W-19	Koehn Lake	4	X						O		X						X						X	X
W-20	Red Mountain/El Paso Mountains (Raptor Breeding Area)	304					X		B		X			X			X	X	X					X
W-21	Western Mojave Desert (Crucial Habitats)[a]	512	X		X	X	X		B		X	X[k]		X			X	X	X		X	X		X
37	Harper Dry Lake	4	X				X	X			X						X						X	X
W-22	Superior Valley (Joshua Tree Woodland and Mohave Ground Squirrel Habitat)	55	X		X				C		X		X											X
W-23	Newberry/Granite Mountains (Raptor Breeding Area)	256					X		B		X		X	X			X	X	X					X
W-24	Ord Mountain (Jojoba Habitat)	6	X							X	X													X
W-25	Shadow Valley (Desert Tortoise Habitat)	42				X			C		X		X							X		X		X
19	Clark Mountain	20	X				X	X[c]	B		X		X	X						X		X	X	X
W-26	Ivanpah Valley (Desert Tortoise Crucial Habitat)	38				X			B		X		X							X		X		X
W-27	Cima Dome	54	X				X		B		X							X		X		X	X	X
31	New York Mountains	85	X				X	X	B		X		X				X	X		X	X	X	X	X
W-28	Indian Springs	4	X						C		X				X								X	X
41	Fort Soda/Mohave Chub	8	X	X	X			X	O		X		X	X		X							X	X
W-29	East Cronese Lake	6	X				X			X	X			X		X			X					X

Legend

ACEC: Area of Critical Environmental Concern. Timetable for completion of ACEC management prescriptions is two years. (See ACEC section of Plan.)

HMP: Habitat Management Plan. The following symbols indicate the length of time to completion of the HMP:

- O - Completed or in progress
- A - 1-2 years
- B - 2-5 years
- C - 5-7 years
- D - 7-10 years

Implementation of HMPs will be an ongoing process but the majority of stipulations will be implemented within two years after completion of the HMP.

RA: Route Approval. Route approval in these areas will be completed within one year following acceptance of Desert Plan.

SA: Special Attention Designation. This designation will take effect immediately.

RNA: Research Natural Area

Sikes: Sikes Act Agreement

Footnotes

[a] Includes Fremont/Stoddard Valleys (Desert Tortoise Crucial Habitat), Indian Wells Valley (Mohave Ground Squirrel Habitat), Fremont Valley (Mohave Ground Squirrel Habitat), Boron/Black Hills (Mohave Ground Squirrel Habitat, and Western Mojave Desert (Saltbush Community).

[b] Within Deep Springs Valley Shadscale Community HMP (W-2).

[c] ACEC includes only a portion of the area covered by the HMP.

[d] Within West Panamint Mountains Canyons HMP (W-10).

[e] Within East Sierra Canyons HMP (W-12).

[f] Within Sierra-Mojave-Tehachapi Ecotone ACEC (20).

[g] ACEC within Argus Mountains Bighorn Sheep Habitat HMP (W-8).

[h] ACEC within Chuckwalla Bench Desert Tortoise Crucial Habitat HMP (W-52).

[i] Within Fenner/Chemehuevi Valleys Desert Tortoise Council Habitat HMP (W-35).

[j] Includes Argus Range Inyo Brown Towhee ACEC (12).

[k] RNA approximately 10,000 acres.

Table WL-1

Proposed Management for Special Fish and Wildlife Areas

									Proposed Wildlife Management Prescription			Other Management Designations		Specific Management Actions Requiring Immediate Implementation (1-3 years)						General Long-Term Management Goals				
Map Key	Location	Acres (000)	Special Wildlife Habitat	Federally Listed Species	State Listed Species	BLM SENSITIVE SPECIES	OTHER SPECIES	ACEC	HMP	RA	SA	RNA	Sikes	Control Vehicle Use	Fence	Remove Exotic Vegetation	Establish Cooperative Agreement with Private Landowner	Increase Surveillance	Restrict Camping and/or Parking	Remove/Reduce Burros/Horses	Land Acquisition in Conjunction with Private Organizations and State Agencies	Changes in Livestock Grazing Practices	Protection of Water Sources	Protect, Stabilize and/or Enhance Fish and Wildlife Resource Values
W-30	Cady Mountains (Bighorn Sheep Habitat)	67					X		B		X		X	X				X	X		X		X	X
43	Afton Canyon	7	X				X	X	A		X		X	X	X	X	X	X	X		X		X	X
W-31	Pisgah Lava Flow	17	X								X	X							X					X
W-32	Old Dad Mountains (Bighorn Sheep Habitat)	19					X		B		X		X										X	X
W-33	Granite Mountains	56	X				X		B		X	X	X						X	X	X	X	X	X
W-34	Kelso Dunes	31	X				X				X			X								X		X
33	Fort Piute	4	X					X	A		X		X		X	X	X	X	X					X
W-35	Fenner/Chemehuevi Valleys (Desert Tortoise Crucial Habitat)	692	X			X			B		X		X				X		X	X	X	X		X
W-36	Stepladder Mountains (Teddy Bear Cholla Thicket)	25	X						i	X	X						X							X
W-37	Chemehuevi Wash	333	X						B		X			X				X	X	X				X
W-38	Whipple Mountains	55	X				X		B		X		X						X	X			X	X
W-39	Vidal Wash	77	X						C		X			X				X	X					X
W-40	Bullion Mountains (Bighorn Sheep Babitat)	16					X		B		X		X										X	X
W-41	Cadiz Dunes	32	X				X				X			X				X						X
49	Whitewater Canyon	12	X				X	X			X						X	X						X
50	Big Morongo Canyon	4	X		X		X	X			X			X		X	X	X	X		X			X
W-42	Coachella Valley (Fringe-toed Lizard Habitst)	4			X		X		A		X		X	X				X	X		X			X
W-43	Little San Bernardino Mountains (Palm Oasis)	<1	X								X												X	X
W-44	Santa Rosa Mountains	196	X	X	X		X		O		X		X								X		X	X
60	Salt Creek Pupfish/Rail Habitat	3	X	X	X			X			X					X	X				X		X	X
W-45	Orocopia Mountains (Bighorn Sheep Habitat)	55					X		B		X		X	X				X					X	X
W-46	Eagle Mountains (Bighorn Sheep Habitat)	54					X		B		X		X										X	X
W-47	Coxcomb Mountains (Bighorn Sheep Habitat)	29					X		B		X		X										X	X
W-48	Granite/Palen Mountains (Bighorn Sheep Babitat)	67					X		B		X		X										X	X
W-49	Midland (Ironwood Thicket)	44	X							X	X			X					X					X
W-50	Rice Valley Dunes	9	X						C		X			X				X	X					X
W-51	McCoy Wash	20	X						C		X			X				X	X					X
W-52	Chuckwalla Bench (Desert Tortoise Crucial Habitat)	225	X			X			B		X		X	X			X		X	X	X			X
59	Chuckwalla Bench	80	X			X		X[h]			X			X			X		X	X	X			X
W-53	Chuckwalla Mountains (Bighorn Sheep Habitat)	63					X		B		X		X					X	X				X	X
56	Corn Spring	4	X		X			X			X			X		X		X	X					X
W-54	Ford Dry Lake	6	X				X		B		X		X											X
57	Chuckwalla Valley Dune Thicket	3	X					X			X			X				X	X					X
W-55	Milpitas Wash	125	X						A		X			X			X	X	X	X	X			X
W-56	Palo Verde Mountains (Saguaro Habitat)	2	X								X							X						X
W-57	Picacho Land and Wildlife Management Area	86					X				X													X
W-58	Indian Wash	29	X						B		X			X				X	X					X
W-59	Algodones Dunes	132	X				X		B		X			X		X		X	X					X
70	East Mesa Flat-tailed Horn Lizard Habitat	110					X	X[c]	A		X		X					X	X					X
61	San Sebaatian Marsh/San Felipe Creek	23	X				X	X	A		X		X	X	X	X	X	X	X		X		X	X
W-60	Coyote Mountains/Davies Valley (Magic Gecko Habitat)	38			X				B		X		X	X				X	X					X
W-61	Smuggler's Cave (Southern Chaparral Babitst)	4	X				X		B		X			X				X	X					X
64	Yuha Basin	98					X	X[c]	A		X		X	X				X	X					X
W-62	Pinto Wash	5	X							X	X			X				X	X					X

Table WL2

Proposed Management for Sensitive, Rare, Threatened, and Endangered Fish and Wildlife of the CDCA*

	Mgmt.	No Areas	Acres (000) in Proposed Management Areas	Acres (000) in Areas Assigned Multiple Use Class[A]
FEDERALLY LISTED SPECIES				
1 Mohave Chub	ACEC/HMP	1	<0.1 (1 locality)	<0.1 (1 locality)
2 Desert Slender Salamander	HMP	1	<0.1 (1 locality)	<0.1 (1 locality)
3. Brown Pelican	SA	-	-	0[B]
4 Aleutian Canada Goose	SA	-	-	0[B]
5 Bald Eagle	SA	-	-	0[B]
6 Peregrine Falcon	SA	-	-	0[B]
7 Yuma Clipper Rail	SA	-	-	0[C]
STATE LISTED SPECIES				
8 Desert Pupfish	ACEC	2	<0.1	<0.1[D]
9 Tehachapi Slender Salamander	ACEC/HMP HMP	1 1	0[E] 0[E]	0[E]
10 Black Toad	ACEC	1	<0.1	<0.1
11 Magic Gecko	HMP	2	42 (5 localities)	69 (5 localities)
12 Coachella Valley Fringe-toed Lizard	HMP	1	4	4
13 California Black Rail	ACEC	1	<0.1 (1 locality)	<0.1[F] (1 locality)

Table WL-2 (Cont'd)

Proposed Management for Sensitive, Rare, Threatened and Engangered Fish and Wildlife of the CDCA*

		Mgmt.	No Areas	Acres (000) in Proposed Management Areas	Acres (000) in Areas Assigned Multiple Use Class^{A}
14	California Yellow-billed Cuckoo	ACEC	1	<0.1 (1 locality)	<0.1^{F} (1 locality)
15	Elf Owl	ACEC	1	<0.1 (1 locality)	<0.1^{F} (1 locality)
16	Least Bell's Vireo	ACEC HMP	2 1	<0.1 (3 localities)	<0.1^{F} (4 localities)
17	Inyo Brown Towhee	ACEC	1	<0.1	<0.1^{F}
18	Mohave Ground Squirrel	ACEC/HMP HMP	1 2	24 296	320^{G}
19	Amargosa Vole	ACEC	1	1	1
20	California Bighorn Sheep	HMP	1	47	0^{H}
21	Peninsular Bighorn Sheep	HMP	2	225	232
BLM SENSITIVE SPECIES					
22	Nevada Speckled Dace	ACEC	1	11 linear mi	13^{J} linear mi
23	Amargosa River Pupfish	ACEC	1	11 linear mi	12 linear mi
24	Inyo Mountains Salamander	HMP	1	<0.1 (10 localities)	<0.1 (10 localities)
25	San Sebastian Leopard Frog	ACEC	1	<0.1 (1 locality)	<0.1 (1 locality)
26	Desert Tortoise	ACEC/HMP HMP	1 5	25 1,705	1,875^{I}

27	Flat-tailed Horned Lizard	ACEC/HMP	2	145	155[K]
28	Desert Bighorn Sheep	ACEC	2	149	2,605
		ACEC/HMP	2	141	
		HMP	13	602	
		SA	1	86	
	OTHER SPECIES				
29	Shoshone Cave Whip-scorpion	HMP	1	<0.1 (1 locality)	<0.1 (1 locality)
30	Andrews' Dune Scarab Beetle	HMP	1	132	147
31	Western Pond Turtle	ACEC/HMP	1	<0.1 (1 locality)	<0.1 (1 locality)
32	Golden Eagle	ACEC	1	12	2,508[F]
		ACEC/HMP	2	226	
		HMP	10	1,339	
33	Osprey	SA	-	-	<0.1 (1 locality)
34	Vermilion Flycatcher	ACEC	2	<0.1 (2 localities)	<0.1[F] (3 localities)
35	Summer Tanager	ACEC	3	<0.1 (3 localities)	<0.1[F] (3 localities)
36	Kingston Mountains Chipmunk	ACEC/HMP	1	28	28
37	Coachella Round-tailed Ground Squirrel	HMP	1	4	4
38	Yellow-eared Pocket Mouse	ACEC/HMP	1	25	55
		HMP	1	30	
39	Panamint Kangaroo Rat	HMP	2	20	20

*Important Note: Acreages include both public and private lands within planning polygons. Some species such as the Black Toad, Coachella Valley Fringe-toed Lizard and Amarosa Vole occur primarily on private lands.

FOOTNOTES

A. Areas represent actual habitat where organism occurs or potentially occurs. Does not include buffer zones or adjacent supporting habitat (e.g., watershed upstream from a riparian area or stream).

B. Habitat within the boundaries of the CDCA occurs on and around the Salton Sea. Public lands with surface and/or mineral rights on and adjacent to the Salton Sea are not included within planning polygons. Stipulation in the Land Tenure Adjustment and Mineral Exploration and Development Elements are included to minimize disturbances to this unique and sensitive fish and wildlife resources.

C. Like the species listed for B, the Yuma Clapper Rail occurs on and around the Salton Sea. There are other localities for the CDCA, but none are known breeding sites.

D. Found around the Salton Sea as well as in the Salt Creek Pupfish/Rail Habitat and San Sebastian Marsh/San Felipe Creek ACECs. See Footnote A.

E. Several riparian habitats in the East Sierra Canyons HMP and Sierra-Mojave-Tehachapi Ecotone HMP/ACEC are potential habitat.

F. These sites include only the breeding localities in the CDCA.

G. Includes only lands within selected representative habitats that are considered crucial to maintain its existence. Total habitat within planning polygons is approximately 1.2 million acres.

H. Currently not found in CDCA; management includes potential reintroduction area only.

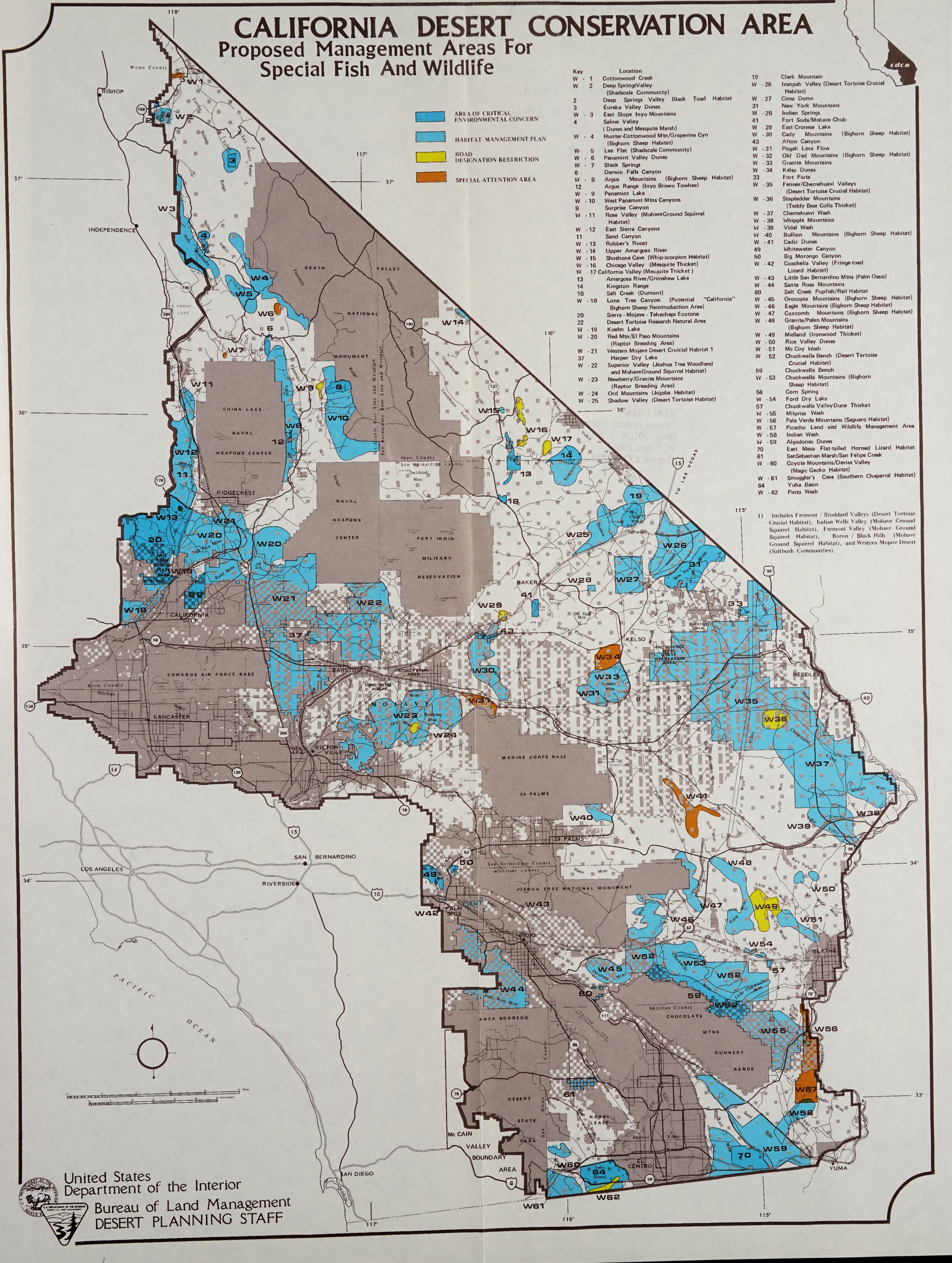
I. Includes only major and minor populations within planning polygons. Total Desert Tortoise habitat within planning polygons is 2.9 million acres.

J. Figure does not include approximately 44 linear mi. of potential/ephemeral habitat.

K. Figure includes only optimal habitat.

CALIFORNIA DESERT CONSERVATION AREA

Proposed Management Areas For Special Fish And Wildlife



- 🟦 AREA OF CRITICAL ENVIRONMENTAL CONCERN
- 🟦 HABITAT MANAGEMENT PLAN
- 🟨 ROAD DESIGNATION RESTRICTION
- 🟧 SPECIAL ATTENTION AREA

Key	Location
W - 1	Cottonwood Creek
W - 2	Deep SpringsValley (Shadscale Community)
2	Deep Springs Velley Black Toad Habitat
3	Eureka Valley Dunes
W - 3	East Slope Inyo Mounteins
4	Saline Velley (Dunes and Mesquite Marsh)
W - 4	Hunter-Cottonwood Mtn/Grapevine Cyn (Bighorn Sheep Habitat)
W- 5	Lee Flat (Shadscale Community)
W - 6	Penamint Valley Dunes
W - 7	Bleck Springs
6	Darwin Falls Canyon
W - 8	Argus Mountains (Bighorn Sheep Habitat)
12	Argus Range (Inyo Brown Towhee)
W - 9	Penamint Lake
W - 10	West Panamint Mtns Canyons
8	Surprise Canyon
W - 11	Rose Valley (MohaveGround Squirrel Habitat)
W - 12	East Sierra Canyons
11	Sand Canyon
W - 13	Robber's Roost
W - 14	Upper Amargosa River
W - 15	Shoshone Cave (Whip-scorpion Hebitat)
W - 16	Chicago Valley (Mesquite Thicket)
W - 17	California Valley (Mesquite Thicket)
13	Amergosa River/Grimshew Lake
14	Kingston Range
18	Salt Creek (Dumont)
W - 18	Lone Tree Canyon (Potential "California" Bighorn Sheep Reintroduction Area)
20	Sierra - Mojave - Tehachapi Ecotone
22	Desert Tortoise Research Netural Area
W - 19	Koehn Leke
W - 20	Red Mtn/El Paso Mountains (Raptor Breeding Area)
W - 21	Western Mojave Desert Cruicial Habitat 1
37	Harper Dry Leke
W - 22	Superior Valley (Joshua Tree Woodland and MohaveGround Squirral Habitat)
W - 23	Newberry/Granite Mountains (Raptor Breeding Area)
W - 24	Ord Mountains (Jojoba Hebitat)
W - 25	Shadow Valley (Desert Tortoise Habitat)
19	Clark Mountain
W - 26	Ivanpah Valley (Desert Tortoise Crucial Habitat)
W - 27	Cima Dome
31	New York Mountains
W - 28	Indien Springs
41	Fort Soda/Mohave Chub
W - 29	East Cronese Lake
W - 30	Cady Mountains (Bighorn Sheep Habitat)
43	Afton Cenyon
W - 31	Pisgah Lava Flow
W - 32	Old Dad Mountains (Bighorn Sheep Hebitat)
W - 33	Granite Mountains
W - 34	Kelso Dunes
33	Fort Piute
W - 35	Fenner/Chemehuevi Valleys (Desert Tortoise Crucial Habitat)
W - 36	Stapladder Mountains (Teddy Baar Colla Thicket)
W - 37	Chemahuevi Wash
W - 38	Whipple Mountains
W - 39	Vidal Wash
W -40	Bullion Mountains (Bighorn Sheep Habitat)
W - 41	Cadiz Dunes
49	Whiteweter Cenyon
50	Big Morongo Cenyon
W - 42	Coachella Valley (Fringe-toed Lizard Habitat)
W - 43	Little San Bernardino Mtns (Palm Oasis)
W - 44	Santa Rosa Mountains
60	Salt Creek Pupfish/Reil Habitat
W - 45	Orocopia Mountains (Bighorn Sheep Habitat)
W - 46	Eagle Mountains (Bighorn Sheep Habitat)
W - 47	Coxcomb Mountains (Bighorn Sheep Habitat)
W - 48	Granite/Palen Mountains (Bighorn Sheep Habitat)
W - 49	Midlend (Ironwood Thicket)
W - 50	Rice Valley Dunes
W - 51	Mc Coy Wash
W - 52	Chuckwalla Bench (Desert Tortoise Cruciel Habitet)
59	Chuckwalla Bench
W - 53	Chuckwalla Mountains (Bighorn Sheep Habitat)
56	Corn Spring
W - 54	Ford Dry Lake
57	Chuckwalla ValleyDune Thicket
W - 55	Milpitas Wash
W - 56	Palo Verde Mountains (Saguaro Habitat)
W - 57	Picacho Lend and Wildlife Management Area
W - 58	Indian Wash
W - 59	Algodones Dunes
70	East Mesa Flat-tailed Horned Lizard Habitat
61	SanSebastian Marsh/San Felipe Creek
W - 60	Coyote Mountains/Devies Valley (Magic Gecko Habitat)
W - 61	Smuggler's Ceve (Southern Chaparral Habitat)
64	Yuha Basin
W - 62	Pinto Wash

1) Includes Fremont / Stoddard Valleys (Desert Tortoise Crucial Habitat), Indian Wells Valley (Mohave Ground Squirrel Habitat), Fremont Valley (Mohave Ground Squirrel Habitat), Boron / Black Hills (Mohave Ground Squirrel Habitat), and Western Mojave Desert (Saltbush Communities).

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VICTORVILLE
BARSTOW
BAKER
KELSO
NEEDLES
29 PALMS
SAN BERNARDINO
LOS ANGELES
RIVERSIDE
PALM SPGS
INDIO
BLYTHE
EL CENTRO
YUMA
SAN DIEGO
Mc CAIN VALLEY BOUNDARY AREA
DEATH VALLEY NATIONAL MONUMENT
CHINA LAKE NAVAL WEAPONS CENTER
NAVAL WEAPONS CENTER
FORT IRWIN MILITARY RESERVATION
EDWARDS AIR FORCE BASE
MARINE CORPS BASE 29 PALMS
JOSHUA TREE NATIONAL MONUMENT
CHOCOLATE MTNS GUNNERY RANGE
ANZA BORREGO DESERT STATE PARK
NAVAL LEASE
PROVIDENCE MTNS STATE RECREATION AREA
USMC NEBO AREA
USMC YERMO AREA
MOJAVE
DESERT
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Inyo County
San Bernardino County
Riverside County
Imperial County
San Diego County
Los Angeles County
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United States
Department of the Interior
Bureau of Land Management
DESERT PLANNING STAFF

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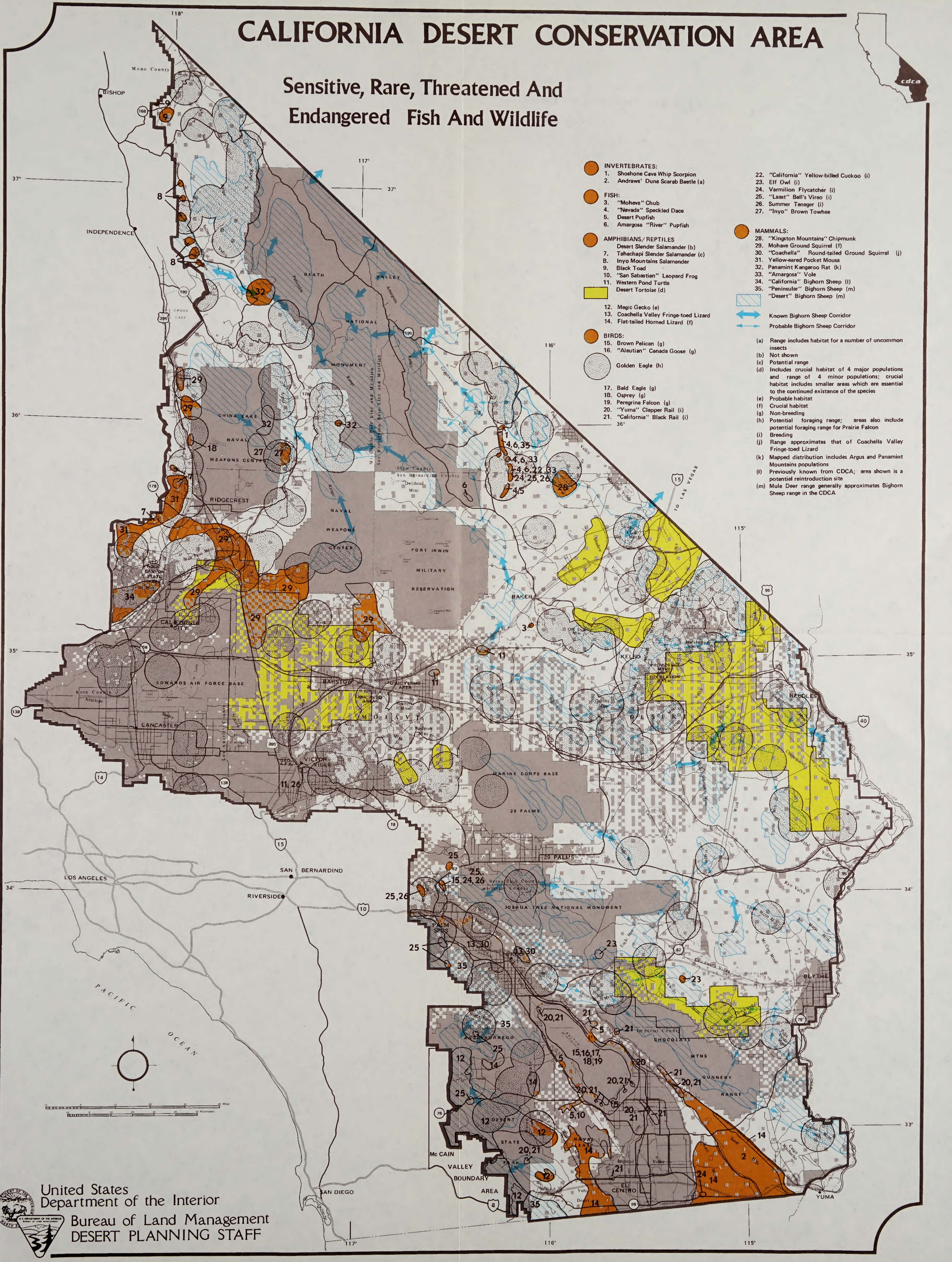
CALIFORNIA DESERT CONSERVATION AREA

Sensitive, Rare, Threatened And Endangered Fish And Wildlife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OWENS LAKE
DEATH VALLEY NATIONAL MONUMENT
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Inyo County
San Bernardino County
BAKER
KELSO
TO LAS VEGAS
RED ROCK CANYON STATE PARK
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LANCASTER
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NEEDLES
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Imperial County
CHOCOLATE MTNS GUNNERY RANGE
EL CENTRO
YUMA
Mc CAIN VALLEY BOUNDARY AREA
SAN DIEGO
PACIFIC OCEAN
Miles
Kilometers

●
INVERTEBRATES:
1. Shoshone Cave Whip Scorpion
2. Andrews' Dune Scarab Beetle (a)

●
FISH:
3. "Mohave" Chub
4. "Nevada" Speckled Dace
5. Desert Pupfish
6. Amargosa "River" Pupfish

●
AMPHIBIANS/REPTILES
Desert Slender Salamander (b)
7. Tehachapi Slender Salamander (c)
8. Inyo Mountains Salamander
9. Black Toad
10. "San Sebastian" Leopard Frog
11. Western Pond Turtle

🟨 Desert Tortoise (d)

12. Magic Gecko (e)
13. Coachella Valley Fringe-toed Lizard
14. Flat-tailed Horned Lizard (f)

●
BIRDS:
15. Brown Pelican (g)
16. "Aleutian" Canada Goose (g)

○ Golden Eagle (h)

17. Bald Eagle (g)
18. Osprey (g)
19. Peregrine Falcon (g)
20. "Yuma" Clapper Rail (i)
21. "California" Black Rail (i)
22. "California" Yellow-billed Cuckoo (i)
23. Elf Owl (i)
24. Vermilion Flycatcher (i)
25. "Least" Bell's Vireo (i)
26. Summer Tanager (i)
27. "Inyo" Brown Towhee

●
MAMMALS:
28. "Kingston Mountains" Chipmunk
29. Mohave Ground Squirrel (f)
30. "Coachella" Round-tailed Ground Squirrel (j)
31. Yellow-eared Pocket Mouse
32. Panamint Kangaroo Rat (k)
33. "Amargosa" Vole
34. "California" Bighorn Sheep (l)
35. "Peninsular" Bighorn Sheep (m)

▨ "Desert" Bighorn Sheep (m)

⟷ Known Bighorn Sheep Corridor

⟷ Probable Bighorn Sheep Corridor

(a) Range includes habitat for a number of uncommon insects
(b) Not shown
(c) Potential range
(d) Includes crucial habitat of 4 major populations and range of 4 minor populations; crucial habitat includes smaller areas which are essential to the continued existance of the species
(e) Probable habitat
(f) Crucial habitat
(g) Non-breeding
(h) Potential foraging range; areas also include potential foraging range for Prairie Falcon
(i) Breeding
(j) Range approximates that of Coachella Valley Fringe-toed Lizard
(k) Mapped distribution includes Argus and Panamint Mountains populations
(l) Previously known from CDCA; area shown is a potential reintroduction site
(m) Mule Deer range generally approximates Bighorn Sheep range in the CDCA

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D. Vegetation Element

FINDING

Although a common attribute of deserts is the sparseness of plant cover, plants are very important to the desert ecosystem, as well as contributing to its aesthetic aspect. Annual wildflower displays occur extensively throughout the CDCA in relation to the frequancy and intensity of precipitation during the fall and winter months, which commonly results in spectacular displays the following spring. Intense summer storms bring other species that complete their entire life cycle in a matter of weeks. While wildflower displays and other special characteristics of desert vegetation provide enjoyment to desert visitors, they are also botanically important to maintain the rich diversity of vegetation in the CDCA.

Botanists view the important environmental factor of vegetation through two perspectives which define its management. The floristic and the vegetation perspectives are different in substance. The floristic perspective includes concerns about the number of rare, threatened, and endangered plant species and unique plant assemblages which have been identified in the CDCA. The vegetation perspective includes concerns about the protection and maintenance of the quality and quantity of production. The management of consumptive use of vegetation, manipulation of vegetation to achieve resource goals, and the cultivation of new desert crops must consider the desert's natural functions along with the consumptive needs of the public.

ELEMENT OUTLINE

1. GOALS
2. ACTIONS PROPOSED
   a. Consumptive Uses of Vegetation
   b. Rare, Threatened, and Endangered Species
   c. Unusual Plant Assemblages
   d. Wetland and Riparian Areas
   e. Vegetation Manipulation
   f. Potential New Desert Crops
3. IMPLEMENTATION
   a. Monitoring
   b. Additional Inventory Needs

1. GOALS

The goals of the Vegetation Element are to:

a. Conserve federally and State-listed rare, threatened, or endangered plants and to use its authority to further the purposes of the Endangered Species Act (ESA) of 1973 and similar State laws. The BLM, through its actions and decisions, will not jeopardize the continued existence of any federally or State-listed rare, threatened, or endangered species, nor will it adversely modify the Critical Habitat (as determined by the U.S. Fish and Wildlife Service) of any such species.

b. Treat those Unique Plant Assemblages (UPAs) rated as highly sensitive and very sensitive in the same manner as rare plant species, to preserve their habitat and ensure the continued existence of the plant assemblage. Those UPAs classified as sensitive and not sensitive will receive special consideration in the Bureau's planning and decision-making process.

c. Manage wetland and riparian areas in the Desert. Specific objectives will be to:

1) Avoid the long term and short term impacts associated with the destruction, loss, or degradation of wetland and riparian areas;

2) Preserve and enhance the natural and beneficial values of wetland and riparian areas which may include constraining or excluding those uses that cause significant long-term ecological damage;

3) Include practical measures to minimize harm in all actions causing adverse impacts to wetland and riparian areas; and

4) Retain all wetlands and riparian habitats under BLM administration ownership where high resource values exist and cannot be mitigated for.

d. Maintain the continued existence and biological viability of the vegetation resource in the CDCA while providing for the consumptive needs of wildlife, livestock, wild horses and burros and other uses from the public at large and to manage this resource under the principle of sustained yield.

e. Provide guidance for the manipulation of plant habitats or vegetation through changing the plant composition, density, and/or cover for accomplishment of specific resource goals. This process may involve removing noxious or poisonous plants from rangelands, increasing forage production, creating open areas within dense brush communities to favor certain wildlife species, or eliminating introduced plant species, such as tamarisk, from riparian areas. Caution will be used when manipulating vegetation. The techniques used today are viable, but should be used only after careful consideration. A balanced use of resources, favoring diversified plant and animal communities, would be desirable over monocultures (pure stands) or the total replacement of native communities.

2. ACTIONS PROPOSED

a. Consumptive Uses of Vegetation

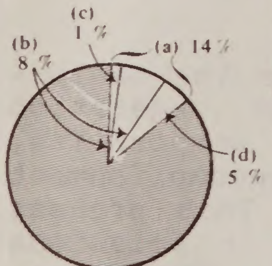
1) VEGETATION PRODUCTION

An understanding of the production/biomass relationship of desert vegetation is necessary if the vegetation is to be managed on a sustained yield basis. In stable natural desert ecosystems, the perennial plant biomass component remains more or less constant even though new biomass is being produced regularly. This indicates a process or series of processes by which biomass disappears at a rate similar to that at which it is being produced. Some such processes are obvious, as is grazing by larger animals; others, involving invertebrate animals and microbes, are more subtle. Nevertheless, it should be understood that if an ecosystem is to remain balanced the average yearly increment of biomass production must be equalled by the same increment of biomass consumption, i.e., on the average, consumption equals production. The amount of standing biomass that persists at any given time should be expected to fluctuate with environmental cycles, i.e., seasons, droughts, etc.

The relationship between production and biomass has relevance if the kind of consumption that takes place, whether it be by livestock, big game, non-game wildlife or other uses, is to be directed by management. Biomass production relationships for the CDCA are shown briefly in Figure V-1.

Figure V - 1

CLASSES OF PERENNIAL PLANT PRODUCTION
as a Percentage of Plant Biomass on Public Lands in the CDCA



(yearly)			% of Total [a] Biomass
Total production	(a)	=	14
Forage production	(b)	=	8
Renewable Livestock forage production	(c)	=	1
Non-forage production	(d)	=	5

a) approximately 18,000,000 metric tons

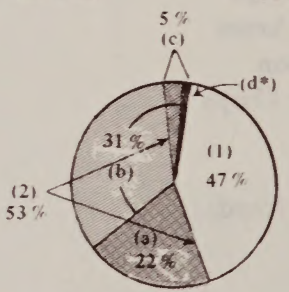
Approximately 14 percent of the perennial plant biomass, of the CDCA (Figure V-1) is renewed each year as new production. That part of the production occurring on public lands judged suitable for livestock grazing (see Livestock Grazing Element) is a point of focus for management recommendations dealing with the allocation of vegetation to livestock and other recognized uses. Since only a part of the yearly plant production is suitable and/or available for livestock in a multiple use sustained yield mode of operation, it is informative to identify that portion in more detail. This portion has been termed "renewable livestock forage" here and in the Livestock Grazing Element. It represents only that part of the production that: 1) is contributed by plant species considered palatable to livestock, 2) can be used (grazed) without adversely affecting the productive capacity of the palatable species or the overall composition of the plant community in which they grow, 3) is produced on terrain suitable for livestock use (i.e., less than 50 percent slope and within 4 miles of livestock waters), and 4) occurs on lands producing above a specified minimum level (i.e., 25 lbs usable forage per acre).

The allocation of vegetation production for the CDCA is summarized in Figure V-2. The category reserved is that which is not identified for a specific use, but represents a portion of the production used by wildlife and other consumers, as well as that which would play a role in watershed protection.

Figure V - 2

IDENTIFIED AND RESERVED ALLOCATION ESTIMATES
of Perennial Plant Production for Public Lands in the CDCA

Identified
Allocated to Livestock = 1.0 %
Allocated to Wildlife *** = .02 %
Allocated to Wild Horse and Burro = .50 %
} (d)* 1.52 %



		% of Total** production
1- Outside Grazing Allotments (reserved)	=	47
2- Inside Grazing Allotments	=	53
(a) Non-forage for Livestock (reserved)	=	22
(b) Total forage	=	31
(c) Renewable forage	=	5
(d)*Identified forage	=	1.52

Total reserved (non-identified) production: approximately 98 %
** approximately 2.5 million metric tons
*** includes Bighorn Sheep and Mule Deer only

2) PLANT HARVESTING

Legal and Biological Considerations

Many considerations are important for developing management strategies for vegetation harvesting, including the public demand for the use of vegetative products, the biological effects of removing plants or plant parts from their environment, and the legal requirements of a multiple-use agency to provide for the needs of the public, while managing for sustained yield and compliance with State laws.

The following are important biological considerations for regulating vegetation harvesting.

a) Desert environments tend to produce slow growing, long-lived perennial plant species, with high densities of annuals during favorable years. In drought years reproduction is very low.

b) Desert environments tend to produce less plant biomass than other environments.

c) Dead standing and dead down plant parts provide important components of wildlife habitat.

d) Dead plant parts provide a source of organic matter for nutrient cycling and soil formation.

e) A dynamic ecological balance exists between the living and non-living members of an ecosystem. Unregulated harvesting of vegetation in excessive quantities could upset this ecological balance resulting in a significant change in the structure and composition of the ecosystem.

f) Little is known about the direct and indirect effects of harvesting vegetation on desert environments.

The following are important legal and policy considerations:

a) The collection and removal of plant parts by recreational users is permitted with stipulations.(43 CFR 8363.1-2)

b) Vegetation may be sold or disposed of under a free use system by permit and with stipulations. (43 CFR 5400 and 5500)

c) The State of California has passed a California Native Desert Plants Act (California Food and Agricultural Code, Division 23 [Chapters 1-8]) which restricts the numbers and types of plants (living and dead) that can be collected and provides for a permit system administered by the counties. The Bureau may establish its own policies on public lands under this law, and administer its own system or cooperate with the counties on their system.

d) The Endangered Species Act of 1973 restricts the commercial import and export of endangered and threatened plant species.

Guidelines for Harvesting

Due to the diversity and complex nature of the vegetation found within the CDCA, no set standard prescription can be developed for harvesting. Instead, each Resource Area would develop its own specific regulations following the guidelines listed below. In addition, each Resource Area will need to collect additional information before developing its own site-specific regulations. The additional data needs include, but are not limited to identification of user needs, assessment of the quantities of resources available, determination of sustained yield by area and species, appraisal of the value of each available resource, and study of the effects of harvesting through ongoing research. Also, programmatic environmental assessment reports for the collection and harvesting of native vegetation will be done.

General Guidelines. Vegetation harvesting will be encouraged in areas where vegetation would be destroyed by other actions, such as sand and gravel pits. Salvage of plant resources in these areas will reduce pressure from collectors in other undisturbed locations.

Specific Guidelines. Three categories of vegetation harvesting are recognized: collection of live whole plants, collection of live plant parts, and collection of dead and down plant parts. Guidelines for each:

1. Collection of live whole plants:

- Collection will be allowed by commercial and non-commercial users with permits only in Multiple-Use Classes L, M, and I. The allowable quantities will be stated in the permit based on the principles of sustained yield and impacts on other resources.

- In addition, scientific and educational uses of live whole plants will be permitted on a case-by-case basis in Multiple-Use Class C.

- Plants listed as rare, threatened, or endangered will not be collected except for scientific purposes by permit, or where plants would be destroyed by another action and can be salvaged.

2. Collection of live plant parts (fruit, flowers, limbs, leaves, etc.):

- Live plant parts may be collected by non-commercial users with BLM permits in all multiple-use classes. The permit will state the quantities which may be collected based on principles of sustained yield. No use of mechanical equipment, severe damage to plants, or damage to habitat would be permitted in the gathering process. Other stipulations may apply on a case-by-case basis.

- Commercial harvesting will be permitted in Classes L, M, and I by permit. The allowable quantities will be stated in the permit based on the principles of sustained yield and the impacts on other resources. No use of mechanical equipment, severe damage to plants, or damage to habitat will be permitted in the process.

- The cutting of live trees (ironwood, palo verde, pinyons, etc.), or any part thereof, will not be allowed.

- Commercial harvesting will be administered through the Bureau's vegetative material sale process.

3. Collection of dead and down plant parts:

- Non-commercial harvesting by free use permit will be allowed in Classes L, M, and I. Quantities of harvested desert ironwood, palo verde, and mesquite will not exceed 1/4 cord; pinyon-juniper would not exceed 1 cord. The frequency of collection and the number of permits issued would be established by the Resource Area. No use of mechanical equipment would be allowed except for chain saws.

- Burning dead and down wood for on site campfires would be permissible without a permit in designated areas. Cutting of live trees will not be allowed. When use-permits will be issued for large groups, users would be required to bring their own wood.

- Commercial harvesting will be allowed in Classes M and I by permit. Quantities would be determined on a case-by-case basis. Collection of ironwood would not be permitted, except in salvage operations.

b. Rare, Threatened, and Endangered Species

A total of 91 species of vascular plants have been identified as rare, threatened, or endangered in the CDCA. Two of these are federally listed endangered species, and nine more have been designated by the State of California as endangered or rare. An additional 54 plant species are currently considered by the U.S. Fish and Wildlife Service (FWS) as candidates for endangered or threatened listing. The remaining species are either considered by the FWS as species of concern or as rare and endangered by the California Native Plant Society (CNPS 1980).

Map No. 9, "Rare, Threatened, and Endangered Plant Species," following the end of the element narrative, shows the distribution of rare, threatened and endangered plant species in the CDCA. A list of these species can be found in the legend accompanying this map. Complete tables of these plants, giving information on life history, flowering season, habitat, distribution, and scarcity, can be found in Appendix X.

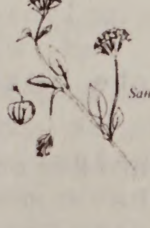
Rare, threatened, and endangered species will be managed in accordance with applicable laws and regulations. These plants will also be protected through wilderness and Areas of Critical Environmental Concern designation and through consideration in all Bureau site-specific environmental impact analyses to ensure that actions funded or authorized by BLM do not jeopardize the continued existence of these plants. The Bureau will conduct or contract inventories and studies on candidate endangered and threatened plants in order to adequately assess the true rarity of each species and the significance of individual populations of each species.

Those plant species on List 2 ("Plants Rare and Endangered") of the California Native Plant Society (CNPS) Inventory of Rare and Endangered Vascular Plants of California (CNPS 1980) and those species recognized by FWS (March 21, 1980) as "Species of Special Concern" (see Appendix X) will be given special consideration in the BLM's planning, environmental and decision-making process.

Pending final decisions on the 54 plant species in the CDCA determined to be candidates for listing as either threatened or endangered by the FWS (Appendix X), all such plants will be afforded the full protection of the Endangered Species Act unless the California State BLM Director judges on a case-by-case basis that the evidence against listing a particular plant species is sufficient to allow a specific action. The burden of proof against listing and the responsibility for possible subsequent constraints in the event that the FWS does list the species in question lies with the BLM.

Two of the FWS candidate endangered plants on public lands in the CDCA are targeted for listing as endangered in 1980. These are the Sodaville milkvetch (Astragalus lentiginosus var. sesquimetralis), which occurs at Big Sand Spring in the northern part of Death Valley, and the Amargosa nitrophila (Nitrophila mohavensis), which occurs east of Death Valley Junction. If these plants are officially listed, as appears likely, Critical Habitat will also be designated for these plants.

Sticky Ring


Sand Verbena

Creosote Bush

c. Unusual Plant Assemblages

Unusual plant assemblages (UPAs) are those stands of vegetation within the CDCA which can be recognized as extraordinary due to one or more factors. These factors include unusual age, unusual size, unusually high cover or density, or disjunction from main centers of distribution. Plant associates which are relatively rare in the Desert due to their alliance with restricted and discontinuous habitats are also considered UPAs. Examples of these UPA types are vegetaion associated with water, such as seeps, springs, riparian areas and plants growing on unusual and restricted substrates (limestone outcroppings, sand dunes, etc.). A number of UPAs have been identified within the CDCA. These UPAs are grouped according to their sensitivity to disturbance (see Appendix X).

Map No. 10, "Unique Plant Assemblages," shows the location of the UPAs identified for the CDCA. The legend accompanying this map gives a complete listing of these UPAs.

The BLM through its planning system will continue to identify and designate special areas possessing representative rare, unique, and unusual features of ecologic, geologic, and aquatic value for the scientific and educational benefits of future generations. Representative unique, unusual, or otherwise significant ecosystems will be identified and included in the Special Area management program. This program includes, but is not limited to, the BLM Natural Area Program, Areas of Critical Environmental Concern, and the National Landmarks Program administered by the Heritage Conservation and Recreation Service. These areas would be large enough to ensure the continued existence of natural ecosystems. Management priority would be assigned based on existing or potential threats to these ecosystems and funding.

Appendix X contains various management options for UPAs and a classification of sensitivity. Highly sensitive and very sensitive UPAs will be treated in the same manner as rare plant species. Every effort will be made to preserve the habitat and ensure the continued existence of the plant assemblages.

Sensitive and low sensitive UPAs will be taken into account when conducting all site-specific environmental impact analyses. Where possible, impacts to these UPAs will be avoided; where impacts cannot be avoided, every effort will be made to achieve the least degree of impact and to mitigate the areas through rehabilitation to stable conditions during or following the action.

d. Wetland and Riparian Areas

Wetland and riparian areas are a rare occurrence in the CDCA and are very important to the desert ecosystem. They are managed under the provision of Executive Order 11990, Protection of Wetlands (42 CFR 26951) and BLM Manual 6740, Wetland - Riparian Area Protection and Management. Riparian vegetation consists of those plants associated with perennially and intermittently flowing rivers and streams, and also vegetation on the shores of lakes and reservoirs. Riparian vegetation often includes tree species such as cottonwoods, sycamores, and willows. Wetlands are areas which are permanently or intermittently flooded because the water table is at, near, or above the soil surface for extended intervals; vegetation usually consists of emergent water-loving plants which require a periodically saturated soil condition, such as bullrushes and cattails.

Map No. 10, "Unique Plant Assemblages," shows the distribution of the important riparian and wetland areas of the CDCA. These areas are mapped under the following UPA headings: vegetation associated with salt and brackish water marshes; vegetation associated with seeps and springs; vegetation associated with palm oases; vegetation associated with riparian zones and bottomland woodlands; and mesquite thickets.

Wetland - riparian areas will be considered in all proposed land use actions. Steps will be taken to ensure their unique characteristics and ecological requirements are managed in accordance with legislative, executive, and secretarial directions. To the extent possible all actions will avoid adverse impacts to wetland and riparian areas. Positive programs will be initiated to rehabilitate those areas that are in a deteriorated condition.

Indian Rice Grass (disturbed area)
- Antelope Valley

e. Vegetation Manipulation

Types of vegetation manipulation include removing noxious or poisonous plants from rangelands; increasing forage production; creating open areas within dense brush communities to favor certain wildlife species; or eliminating introduced plant species, such as tamarisk, from riparian areas. These modifications should be considered as one tool in the management of the California Desert.

METHODS OF MODIFICATION

Several methods of manipulation are available to managers and can be used for specific goals. The objectives would be clearly defined through site-specific planning. Types of modification techniques include:

1. Mechanical Control. This type of manipulation would involve the use of dozer blades, disking, chaining, roller cutting, etc. These techniques create a high degree of soil disturbance and would not allowed in Classes C and L. Use in Classes M and I would be carefully considered as to the significant impacts.

2. Chemical Control. Aerial broadcast application would not be allowed due to potential environmental consequences. Spot application would be allowed in Classes M and I. Noxious weed eradication may be allowed in Class L after site-specific planning.

3. Exclosures. This is a manipulation technique where livestock and certain wildlife species can be excluded from fenced areas. This procedure provides comparison data and is valuable in the determination of grazing effects on vegetation. This technique would be allowed in Classes L, M, and I.

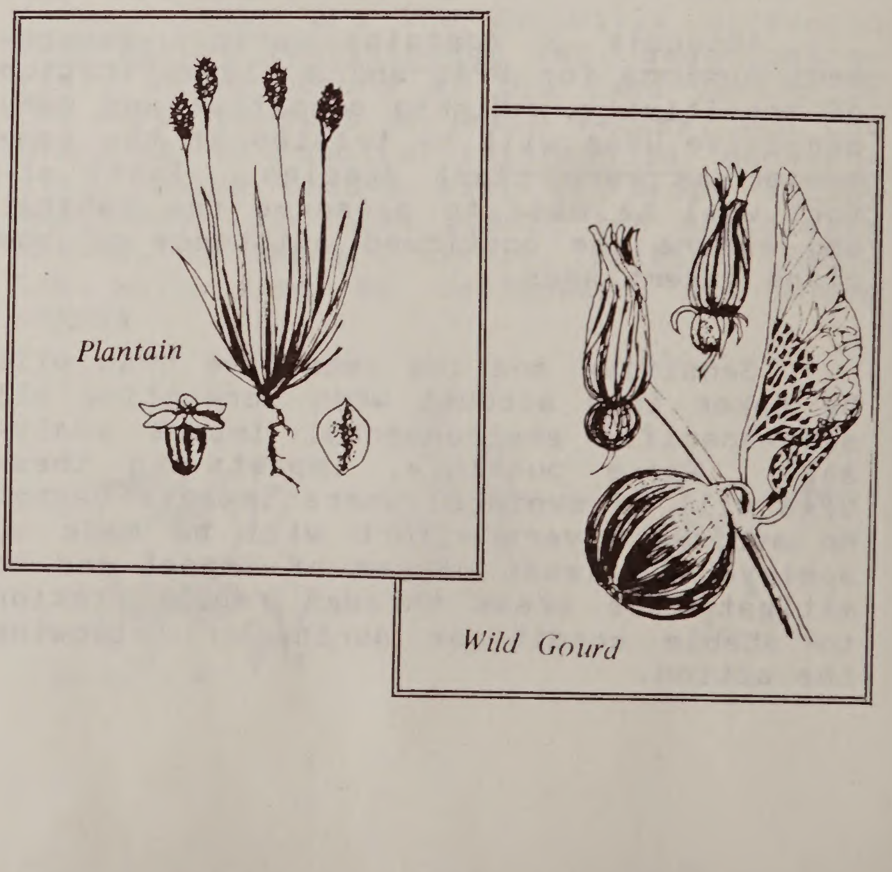
4. Prescribed Burning. When fires are purposely set under prescribed conditions certain species can be favored or eliminated, livestock forage can be increased, and wildlife habitat can be modified to favor a particular species. This technique would be allowed in Classes L, M, and I after a site-specific management plan is developed.

Little is published on the effects of fire on desert vegetation. This is in part due to the low fire frequency and the low intensity of burns when they do occur. However, fire -- even with low frequency and intensity -- will modify the structure and composition of an area and therefore affect the ecosystem. Some shrubs, such as felt-thorn and rabbit bush, respond to burning by sprouting new shoots from their bases, while plants like big sage brush very seldom sprout. Other plants, such as mesquite fall somewhere in between and are unpredictable in their sprouting behavior. If fires are reoccurring, the nonsprouting species can be eliminated through direct kill or by affected age classes. Thus, fire can be used to purposely alter plant composition or age class to favor a particular species. For example, fire can be used to increase gross forage production in some areas. Big galleta grass, an important forage species, will show increases in production at the expense of shrub plants like mesquite and catclaw. Increased fires could thus alter a plant community by increasing the amount of perennial grass and decreasing some of the shrub components. Other factors, such as climate and soils, are also very important and may dictate whether a desert grassland could be developed using prescribed burning techniques.

f. Potential New Desert Crops

Interest has increased in recent years in several potential new arid zone crops, particularly jojoba. The seeds of jojoba contain a liquid wax which is almost identical to the industrially important oil of the sperm whale. An important market exists for such a product because importation of sperm whale oil has been forbidden since 1970.

The need for leasing public land for growing jojoba appears to be speculated because the plant has not yet been successfully cultivated for commercial purposes. Therefore, the economic potential from growing the species cannot be demonstrated (43 CFR 2520.0-8 [d] [3]; see "Facts Report - Jojoba - An Arid Land Species" in Appendix X). The seed or oil yield that can be expected from jojoba cannot be predicted at this time (Hermanos 1979). The greatest uncertainty about the future of jojoba involves the selection of genetic material which is capable of consistently producing substantial seed yields.



Other new potential arid zone crops which are under consideration for the future and which might be grown in the CDCA include guayule, buffalo gourd, mesquite, and gopher plant. Guayule is a potential source of natural rubber. Buffalo gourd produces vegetable oil, protein, and starch. Mesquite could produce food for livestock and humans, and the woody biomass might be used for fuel. Gopher plant has been proposed as a petroleum substitute. All of these species are in the research and development stage. If jojoba or any of the other species are proven commercially successful in the future, the possibility of leasing public lands in the CDCA may be considered. Until such time as one or more of these species is proven to be successful, leasing only for small experimental plots is being considered.

A more complete discussion of jojoba and the other species is given in Appendix X.

3. IMPLEMENTATION

a. Monitoring

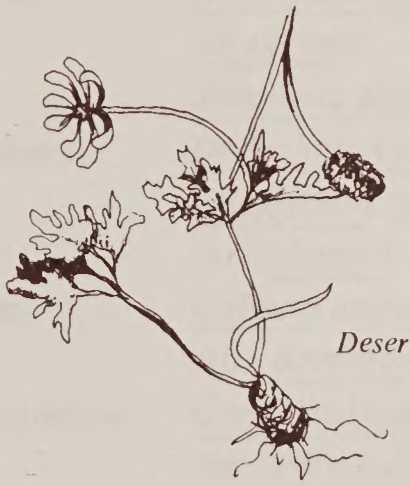
Monitoring efforts would be directed to those areas with the greatest management need. Criteria would include the presence of vegetation or a species of high value or sensitivity and the type and intensity of impact. Also, actions that would modify vegetation structure or composition would be monitored. These actions include, but are not limited to, grazing leases (see Livestock Grazing Element), ORV competitive events and open areas, the construction of utility corridors, and mining or mineral development.

Currently, five monitoring baseline methods (see Appendix X) have been used within the CDCA; exclosures, permanent plots, permanent photo sites, spot sampling, and remote sensing. All of these methods are viable and would continue to be used depending on the resource and the type of uses in the area.

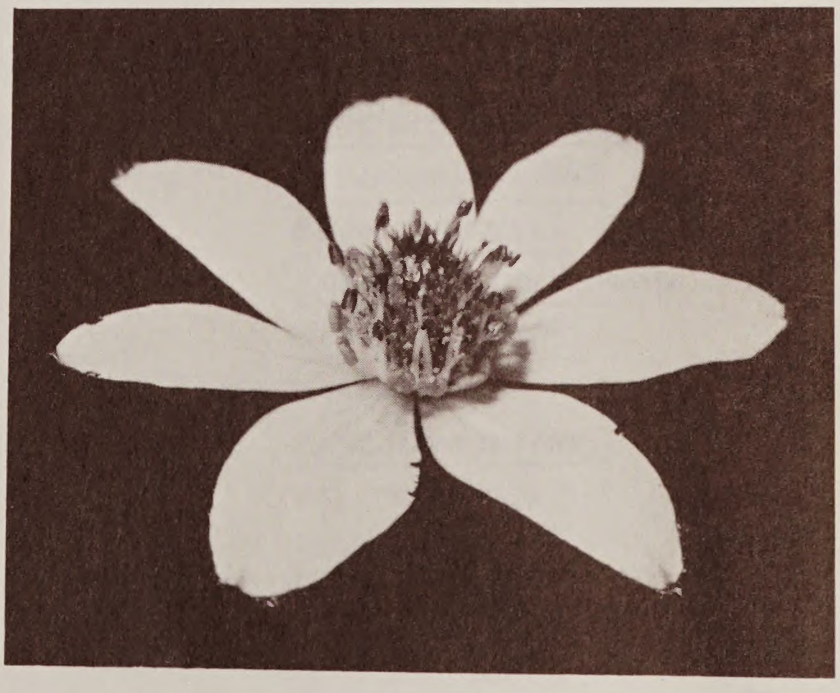
Floral Display of *Malacothrix dobrota* (Desert Dandelion) Hwy 395

b. Additional Inventory Needs

Additional inventory needs have been identified in several areas. The need for vegetation inventories in determining forage availability for livestock, wildlife, and wild horses and burros is obvious (see these elements for details). Inventory efforts are also necessary to determine the distribution and status of rare, threatened, and endangered plants and UPAs. This need has been more fully discussed previously in the section on rare, threatened, and endangered plants. The inventory need with regard to UPAs is much the same, with priority being given to those UPAs which are highly sensitive and very sensitive (see Appendix X). In order to assess the number of plants and plant parts which may be harvested without deleterious effects to the species and ecosystem in question, it is necessary to concentrate inventory efforts on an area-by-area basis. This has been more fully discussed under the Consumptive Use of Vegetation subsection under the Actions Proposed section of this Element.



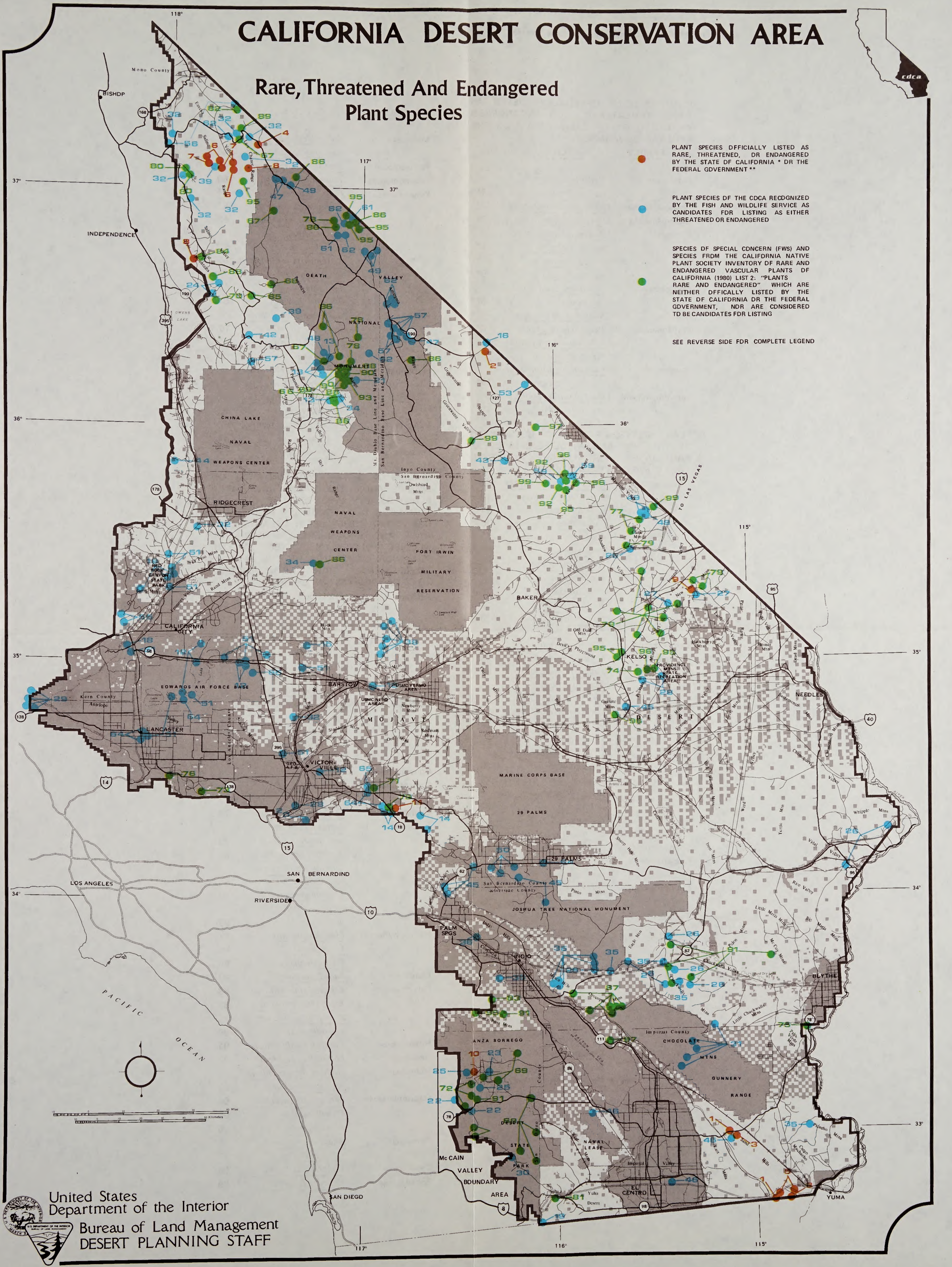
Desert Anemone



Anemone *(Anemone tuberosa)* - Whipple Mountains

CALIFORNIA DESERT CONSERVATION AREA

Rare, Threatened And Endangered Plant Species


cdca
BISHOP
Mono County
INDEPENDENCE
OWENS LAKE
DEATH VALLEY NATIONAL MONUMENT
CHINA LAKE NAVAL WEAPONS CENTER
NAVAL WEAPONS CENTER
FORT IRWIN MILITARY RESERVATION
RIDGECREST
Inyo County
San Bernardino County
RED ROCK CANYON STATE PARK
CALIFORNIA CITY
Kern County
EDWARDS AIR FORCE BASE
LANCASTER
BARSTOW
USMC YERMO AREA
USMC NEBO AREA
MOJAVE
VICTORVILLE
BAKER
KELSO
PROVIDENCE MTNS STATE RECREATION AREA
DESERT
NEEDLES
MARINE CORPS BASE 29 PALMS
29 PALMS
San Bernardino County
Riverside County
JOSHUA TREE NATIONAL MONUMENT
LOS ANGELES
SAN BERNARDINO
RIVERSIDE
PALM SPGS
INDIO
BLYTHE
Imperial County
CHOCOLATE MTNS GUNNERY RANGE
ANZA BORREGO DESERT STATE PARK
NAVAL LEASE
McCAIN VALLEY BOUNDARY AREA
EL CENTRO
SAN DIEGO
YUMA
PACIFIC OCEAN
TO LAS VEGAS
118°
117°
116°
115°
37°
36°
35°
34°
33°

● PLANT SPECIES OFFICIALLY LISTED AS RARE, THREATENED, OR ENDANGERED BY THE STATE OF CALIFORNIA * OR THE FEDERAL GOVERNMENT **

● PLANT SPECIES OF THE CDCA RECOGNIZED BY THE FISH AND WILDLIFE SERVICE AS CANDIDATES FOR LISTING AS EITHER THREATENED OR ENDANGERED

● SPECIES OF SPECIAL CONCERN (FWS) AND SPECIES FROM THE CALIFORNIA NATIVE PLANT SOCIETY INVENTORY OF RARE AND ENDANGERED VASCULAR PLANTS OF CALIFORNIA (1980) LIST 2: "PLANTS RARE AND ENDANGERED" WHICH ARE NEITHER OFFICALLY LISTED BY THE STATE OF CALIFORNIA OR THE FEDERAL GOVERNMENT, NOR ARE CONSIDERED TO BE CANDIDATES FOR LISTING

SEE REVERSE SIDE FOR COMPLETE LEGEND

United States
Department of the Interior
Bureau of Land Management
DESERT PLANNING STAFF

Map No. 9

Rare, Threatened and Endangered Plant Species

PLANT SPECIES OFFICIALLY LISTED AS RARE, THREATENED, OR ENDANGERED BY THE STATE OF CALIFORNIA * OR THE FEDERAL GOVERNMENT **

FAMILY	SPECIES	Map No.
Asteraceae	*Helianthus niveus var. tephrodes*	1*
Chenopodiaceae	*Nitrophila mohavensis*	2*
Euphorbiaceae	*Croton wigginsii*	3*
Fabaceae	*Astragalus lentiginosus var. sesquimetralis*	4*
	A. magdalenae var. piersonii	5*
Onagraceae	*Oenothera avita ssp. eurekensis*	6**
Poaceae	*Swallenia alexandrae*	7**
Polygonaceae	*Dedeckera eurekensis*	8*
	Eriogonum ericifolium var. thornei	9*
Rubiaceae	*Gallium angustifolium ssp. borregoense*	10*
Scrophulariaceae	*Cordylanthus eremicus ssp. bernardinus*	11*

PLANT SPECIES OF THE CDCA RECOGNIZED BY THE FISH AND WILDLIFE SERVICE AS CANDIDATES FOR LISTING AS EITHER THREATENED OR ENDANGERED

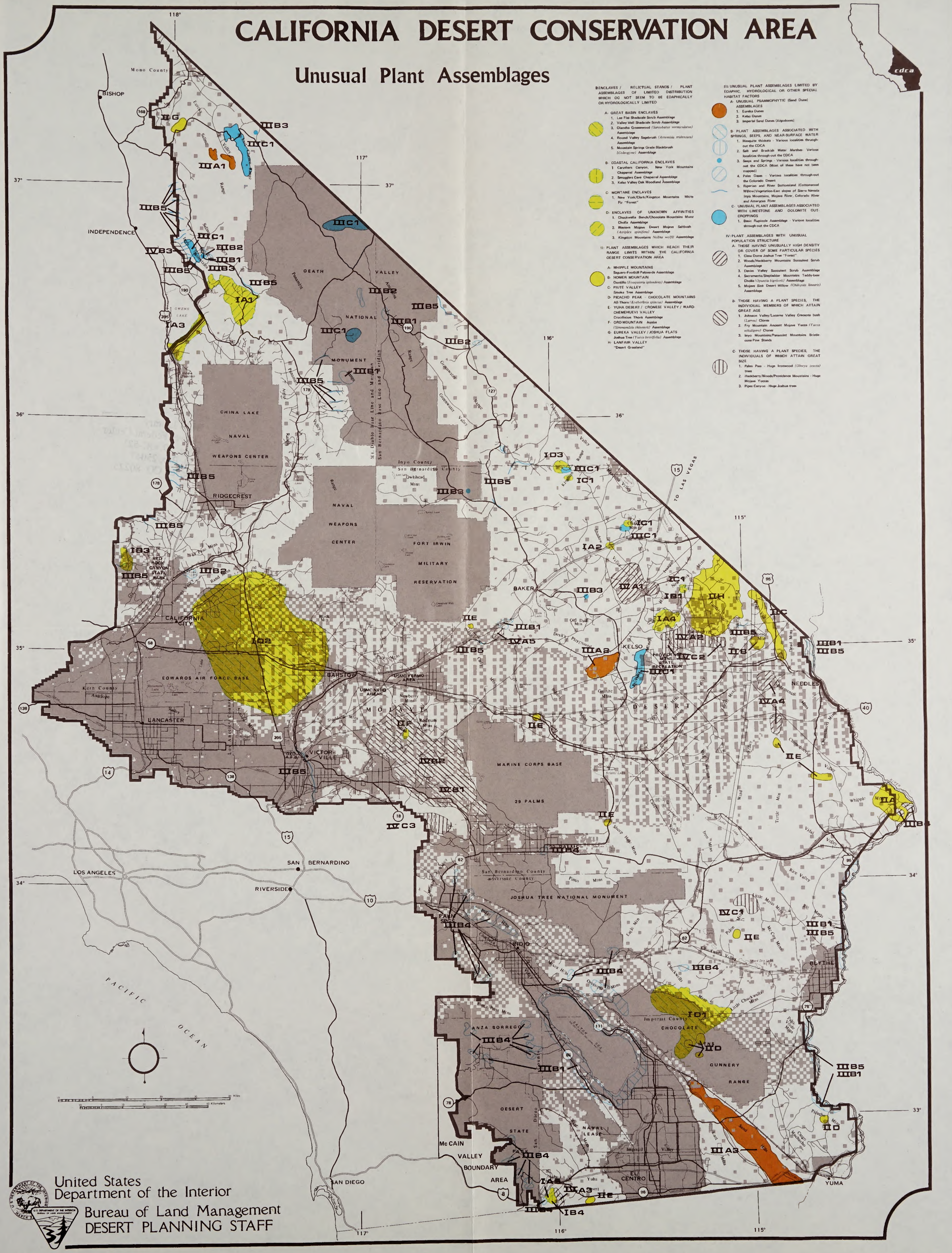
FAMILY	SPECIES	Map No.
Asteraceae	*Cymopterus deserticola*	12
	Enceliopsis covillei	13
	Erigeron parishii	14
	Eriphyllum mohavense	15
	Grindellia fraxinopratensis	16
	Helianthus niveus var. tephrodes	1 *
	Hemizonia arida	18
	H. floribunda	19
	H. mohavensis	20
	Perityle villosa	21
Berberidaceae	*Berberis nevinii*	22
Boraginaceae	*Cryptantha ganderi*	23
Brassicaceae	*Caulostraminea jaegeri*	24
	Lepidium flavum var. filipense	25
Cactaceae	*Coryphantha vivipara var. alversonii*	26
	C. vivipara var. rosea	27
	Opuntia basilaris var. brachyclada	28
	O. basilaris var. treleasei	29
	O. bigelovii var. hoffmannii	30
	O. munzii	31
	Sclerocactus polyancistrus	32
Chenopodiaceae	*Nitrophila mohavensis*	2 *
Crassulaceae	*Dudleya saxosa ssp. saxosa*	34
Euphorbiaceae	*Ditaxis californica*	35
	Euphorbia platysperma	36
Fabaceae	*Astragalus funereus*	37
	A. jaegerianus	38
	A. lentiginosus var. micans	39
	A. lentiginosus var. sesquimetralis	4 *
	A. magdalenae var. piersonii	5*
	A. mohavensis var. hemigyrus	42
Gentianaceae	*Centaurium namophilum*	43
Hydrophyllaceae	*Phacelia novenmillensis*	44
Lamiaceae	*Monardella robisonii*	45
Lennoaceae	*Ammobroma sonorae*	46
Loasaceae	*Petalonyx thurberi ssp. gilmanii*	47
Malvaceae	*Sphaeralcea rusby ssp. eremicola*	48
Papaveraceae	*Arctomecon merriamii*	49
Polemoniaceae	*Linanthus macculatus*	50
Polygonaceae	*Chorizanthe spinosa*	51
	Dedeckera eurekensis	8 *
	Eriogonum bifurcatum	53
	E. ercifolium var. thornei	9 *
	E. kennedyi var. pinicola	55
	E. ovalifolium ssp. vineum	56
	Gilmania luteola	57
Rubiaceae	*Gallium angustifolium ssp. borregoense*	10 *
	G. hilendiae ssp. kingstonense	59
Scrophulariaceae	*Cordylanthus eremicus ssp. bernardinus*	11 *
	Maurandya petrophila	61
	Mimulus rupicola	62
Liliaceae	*Calochortus excavatus*	63
	C. striatus	64
Poaceae	*Puccinellia parishii*	65

SPECIES OF SPECIAL CONCERN (FWS) AND SPECIES FROM THE CALIFORNIA NATIVE PLANT SOCIETY INVENTORY OF RARE AND ENDANGERED VASCULAR PLANTS OF CALIFORNIA (1980) LIST 2: "PLANTS RARE AND ENDANGERED" WHICH ARE NEITHER OFFICALLY LISTED BY THE STATE OF CALIFORNIA OR THE FEDERAL GOVERNMENT, NOR ARE CONSIDERED TO BE CANDIDATES FOR LISTING

FAMILY	SPECIES	Map No.
Asteraceae	*Brickellia knappiana*	66
	Enceliopsis nudicaulis	67
	Hulsea vestita ssp. inyoensis	68
	Machaeranthera orcutii	69
	Perityle inyoensis	70
Brassicaceae	*Arabis shockleyi*	71
	Caulanthus simulans	72
Cactaceae	*Echinocereus engelmannii ssp. minzii*	73
	Opuntia phaeacantha var. mohavensis	74
	O. wigginsii	75
Convolvulceae	*Calystegia piersonii*	76
Crossosomataceae	*Forsellesia pungens var. glabra*	77
Euphorbiaceae	*Tetracoccus ilicifolius*	78
Fabaceae	*Astragalus cimae var. cimae*	79
	A. cimae var. sufflatus	80
	Lupinus excubitus var. medius	81
	L. holmgrenanus	82
	Marina orcuttii var. orcuttii	83
Hydrophyllaceae	*Phacelia amabilis*	84
	P. anelsonii	85
	P. mustelina	86
Lamiaceae	*Salvia greatae*	87
Polygonaceae	*Eriogonium eremicola*	88
	Eriogonum gilmanii	89
	E. microthecum var. panamintense	90
Rhamnaceae	*Colubrina californica*	91
Roscaeae	*Potentilla patelifera*	92
Rubiaceae	*Gallium hypotrichum ssp. tomentellum*	93
Scrophulariaceae	*Penstemon calcareus*	94
	P. californicus	95
	P. stephensii	96
Agavaceae	*Agave utahensis var. eborispina*	97
Cyperaceae	*Fimbristylis thermalis*	98
Ephedraceae	*Ephedra funerea*	99

CALIFORNIA DESERT CONSERVATION AREA

Unusual Plant Assemblages



cdca
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RIDGECREST
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FORT IRWIN MILITARY RESERVATION
Inyo County
San Bernardino County
BAKER
KELSO
PROVIDENCE MTNS. STATE RECREATION AREA
NEEDLES
CALIFORNIA CITY
EDWARDS AIR FORCE BASE
Kern County
LANCASTER
BARSTOW
USMC YERMO AREA
USMC NEBO AREA
MOJAVE DESERT
VICTORVILLE
MARINE CORPS BASE 29 PALMS
SAN BERNARDINO
LOS ANGELES
RIVERSIDE
Riverside County
JOSHUA TREE NATIONAL MONUMENT
PALM SPRINGS
INDIO
BLYTHE
ANZA BORREGO DESERT STATE PARK
Imperial County
CHOCOLATE MTNS. GUNNERY RANGE
NAVAL LEASE
SALTON SEA
McCAIN VALLEY BOUNDARY AREA
SAN DIEGO
EL CENTRO
YUMA
PACIFIC OCEAN
TO LAS VEGAS
118°
117°
116°
115°
37°
36°
35°
34°
33°
Miles
Kilometers

I: ENCLAVES / RELICTUAL STANDS / PLANT ASSEMBLAGES OF LIMITED DISTRIBUTION WHICH DO NOT SEEM TO BE EDAPHICALLY OR HYDROLOGICALLY LIMITED

A. GREAT BASIN ENCLAVES
1. Lee Flat Shadscale Scrub Assemblage
2. Valley Well Shadscale Scrub Assemblage
3. Olancha Greasewood (*Sarcobatus vermiculatus*) Assemblage
4. Round Valley Sagebrush (*Artemisia tridentata*) Assemblage
5. Mountain Springs Grade Blackbrush (*Coleogyne*) Assemblage

B. COASTAL CALIFORNIA ENCLAVES
1. Caruthers Canyon, New York Mountains Chaparral Assemblage
2. Smugglers Cave Chaparral Assemblage
3. Kelso Valley Oak Woodland Assemblage

C. MONTANE ENCLAVES
1. New York/Clark/Kingston Mountains White Fir "Forest"

D. ENCLAVES OF UNKNOWN AFFINITIES
1. Chuckwalla Bench/Chocolate Mountains Munz Cholla Assemblage
2. Western Mojave Desert Mojave Saltbush (*Atriplex spinifera*) Assemblage
3. Kingston Mountains *Nolina wolfii* Assemblage

II: PLANT ASSEMBLAGES WHICH REACH THEIR RANGE LIMITS WITHIN THE CALIFORNIA DESERT CONSERVATION AREA

A. WHIPPLE MOUNTAINS
Saguaro-Foothill Paloverde Assemblage
B. HOMER MOUNTAIN
Ocotillo (*Fouquieria splendens*) Assemblage
C. PIUTE VALLEY
Smoke Tree Assemblage
D. PICACHO PEAK - CHOCOLATE MOUNTAINS
All-Thorn (*Koeberlinia spinosa*) Assemblage
E. YUHA DESERT / CRONESE VALLEY / WARD-CHEMEHUEVI VALLEY
Crucifixion Thorn Assemblage
F. ORD MOUNTAIN Jojoba (*Simmondsia chinensis*) Assemblage
G. EUREKA VALLEY / JOSHUA FLATS
Joshua Tree (*Yucca brevifolia*) Assemblage
H. LANFAIR VALLEY
"Desert Grassland"

III: UNUSUAL PLANT ASSEMBLAGES LIMITED BY EDAPHIC, HYDROLOGICAL OR OTHER SPECIAL HABITAT FACTORS

A. UNUSUAL PSAMMOPHYTIC (Sand Dune) ASSEMBLAGES
1. Eureka Dunes
2. Kelso Dunes
3. Imperial Sand Dunes (Algodones)

B. PLANT ASSEMBLAGES ASSOCIATED WITH SPRINGS, SEEPS, AND NEAR-SURFACE WATER
1. Mesquite thickets - Various localities through-out the CDCA
2. Salt and Brackish Water Marshes - Various localities through-out the CDCA
3. Seeps and Springs - Various localities through-out the CDCA (Most of these have not been mapped)
4. Palm Oases - Various localities through-out the Colorado Desert
5. Riparian and River Bottomland (Cottonwood Willow) Vegetation-East slopes of Sierra Nevada Inyo Mountains, Mojave River, Colorado River and Amargosa River

C. UNUSUAL PLANT ASSEMBLAGES ASSOCIATED WITH LIMESTONE AND DOLOMITE OUT-CROPPINGS
1. Basic Rupicole Assemblage - Various localities through-out the CDCA

IV: PLANT ASSEMBLAGES WITH UNUSUAL POPULATION STRUCTURE

A. THOSE HAVING UNUSUALLY HIGH DENSITY OR COVER OF SOME PARTICULAR SPECIES
1. Cima Dome Joshua Tree "Forest"
2. Woods/Hackberry Mountains Succulent Scrub Assemblage
3. Davies Valley Succulent Scrub Assemblage
4. Sacramento/Stepladder Mountains Teddy-bear Cholla (*Opuntia bigelovii*) Assemblage
5. Mojave Sink Desert Willow (*Chilopsis linearis*) Assemblage

B. THOSE HAVING A PLANT SPECIES, THE INDIVIDUAL MEMBERS OF WHICH ATTAIN GREAT AGE
1. Johnson Valley/Lucerne Valley Creosote bush (*Larrea*) Clones
2. Fry Mountain Ancient Mojave Yucca (*Yucca schidigera*) Clones
3. Inyo Mountains/Panamint Mountains Bristle-cone Pine Stands

C. THOSE HAVING A PLANT SPECIES, THE INDIVIDUALS OF WHICH ATTAIN GREAT SIZE
1. Palen Pass - Huge Ironwood (*Olneya tesota*) trees
2. Hackberry/Woods/Providence Mountains - Huge Mojave Yuccas
3. Pipes Canyon - Huge Joshua trees

United States
Department of the Interior
Bureau of Land Management
DESERT PLANNING STAFF

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E. Wilderness Element

FINDING

The opportunity to protect wilderness values on a regional basis is unique to the comprehensive land use planning effort for the CDCA. The examination and review of desert public lands for wilderness characteristics has resulted in a recommendation to the Congress that more than one-sixth of the CDCA public lands are considered suitable for inclusion in the National Wilderness Preservation System. Prior to Congressional determination, these lands will receive special consideration and management to assure that their wilderness characteristics and values are maintained within the desert ecosystem of which they are a pristine part.

ELEMENT OUTLINE

1. GOALS
2. ACTIONS PROPOSED
    a. Recommended WSAs
    b. Methodology
    c. Interim Management
    d. After Congressional Designations
3. IMPLEMENTATION
    a. Schedule and Priorities
    b. Monitoring

1. GOALS

The Wilderness Act of 1964 provided for the establishment of a National Wilderness Preservation System with areas to be designated from public lands within the National Forests, the National Parks, and the National Wildlife Refuges. Public lands administered by the Bureau of Land Management (BLM) were not included in the original Act. However, in 1976, the Federal Land Policy and Management Act (FLPMA) directed that lands under BLM jurisdiction be inventoried and evaluated for wilderness potential, and that recommendations be made to Congress as to the suitability or nonsuitability of each Wilderness Study Area (WSA) for inclusion in the National Wilderness Preservation System.

The CDCA was established by FLPMA with a mandate to provide a comprehensive desertwide management plan to Congress by September 30, 1980. This required that wilderness be evaluated in the CDCA in time to have those values considered in the Desert Plan.

The goal of this element is designation of CDCA Wilderness Areas which will provide a representative system of areas and accomplish two major objectives:

a. Accomplish the intent and policy of Congress as stated in the Wilderness Act of 1964 to "...secure for the American people of present and future generations the benefit of an enduring resource of wilderness."

b. Provide a variety of physical settings and challenges necessary to support a broad spectrum of opportunities of experiences for primitive recreation and solitude.

2. ACTIONS PROPOSED

a. Recommended WSAs

The selection of areas suitable for wilderness designation reflects the Bureau policy that wilderness is a status which should last forever. The resource analysis on each WSA recommended as suitable led to the determination that wilderness is the highest and best use of these areas, both now and in the future.

The Proposed Plan recommends 43 WSAs, approximately 2,070,000 acres of the public lands in the CDCA, as suitable for wilderness designation by Congress. Map No. 11 shows the location of all WSAs in the CDCA, those recommended for designation, and the wilderness status of adjacent or nearby lands administered by other Federal and State agencies. Recommended WSAs are also shown as Multiple-Use Class C on Map No. 2, "Proposed Plan," inserted in the back cover pocket of this document, and listed on Table W-1 at the end of this element.

b. Methodology

The CDCA Wilderness Review Program consists of three phases; the inventory phase, the study phase, and the reporting phase. A brief description of each follows. (A more detailed description of the procedures followed in each phase can be found in Appendix III.)

The inventory phase of the BLM's Wilderness Program in the CDCA began in April, 1978, and ended in February 1979. It was a period of extensive field investigation and public involvement through public hearings and workshops and through written comments. As a result, 5.7 million acres of BLM-administered public lands were identified as Wilderness Study Areas (WSAs), or lands meeting the criteria of Section 2(c) of the Wilderness Act of 1964.

Following the designation of WSAs, the Wilderness Program entered its second, or study, phase. In the study phase, which has been conducted within the framework of the CDCA planning process, consideration is given to all resource values and opportunities, and a determination of "highest and best use(s)" for each WSA is made with wilderness being only one alternative. The study phase analysis leads to recommendations for each WSA as suitable or nonsuitable for wilderness designation by Congress. Those areas recommended as suitable for wilderness designation are represented as Multiple-Use Class C in this Proposed Plan.

The facts analyzed in determining wilderness suitability or nonsuitability for each WSA in the CDCA included:

1) The relative Desert wilderness quality of each WSA.

2) The application of criteria for resource conflict resolution.

3) The review of criteria, including:

  a) Ecosystem and landform representation and uniqueness.

  b) Proximity to urban centers.

  c) Accessibility to all segments of the population (e.g., handicapped, elderly, and underprivileged).

Public opinion was obtained from public meetings conducted during both the inventory and study phases; from the study phase worksheets distributed with the final wilderness inventory maps and narrative booklet in March 1979; from the Draft Plan workbook in February 1980; and from letters, telephone conversations, and in-person contacts.

The Draft Plan Alternatives and EIS, published in February 1980, presented the preliminary wilderness suitability recommendations which varied according to the overall objectives for each alternative. Public comment on the Draft Plan Alternatives and new information were used to develop the wilderness suitability and nonsuitability recommendations appearing in this Proposed Plan. All or portions of 43 WSAs, totalling about 2.07 million acres of public lands are recommended as suitable for wilderness, or Class C, while 93 areas have been recommended as nonsuitable. The recommendation on one WSA (#119 Little Sand Spring), which is contiguous with roadless lands under consideration for wilderness, but administered by BLM outside the CDCA, has been deferred until a joint study can be completed. Deferred status was considered only here because a final recommendation would significantly affect planning decisions for the adjacent roadless area.

A valley in Lava Mountains. This and other photos in this element show the diversity of land forms proposed for wilderness designation in the CDCA.

The reporting phase of the CDCA Wilderness program will commence upon approval of the Plan. A wilderness study report consists of actually forwarding, or reporting, the recommendations on suitability or nonsuitability for wilderness designation to the Secretary of the Interior.

Areas designated as Class C (recommended as suitable for wilderness) have highly significant resource values, which include wilderness values, but also include wildlife, cultural, scenic, botanical, geologic, and other values. To protect these significant resource values, any suitable areas not designated as wilderness by Congress will revert to a Multiple-Use Class L designation. Should it be determined in the reporting phase through new information gained from mineral surveys or other sources that the subsequent Class L designation is inappropriate for some of these areas, the class will be amended, through the Plan Amendment process, to the appropriate multiple-use class, unless Congressional action specifies an appropriate alternative.

Upper Warm Springs - Saline Valley

Similarly, those WSAs recommended for nonsuitability and approved as such by Congress, will be managed in accordance with the appropriate multiple-use class as designated in this Plan. However, until Congress acts, these nonsuitable areas will be managed under Class WSA.

The Wilderness Element does not represent a final decision by the Secretary of the Interior. Further requirements specified by Congress remain to be satisfied with respect to wilderness, involving both the areas shown in this plan as "suitable" for wilderness designation and the areas shown as "nonsuitable." Therefore all the wilderness recommendations in the Desert Plan are preliminary, and are subject to change during further administrative review.

Only Congress can designate an area as wilderness. FLPMA and the Wilderness Act establish a process by which the Bureau of Land Management sends its recommendations to the Secretary of the Interior, who sends his recommendations to the President, who then sends his recommendations to Congress for final action. In the case of the California Desert, the following requirements remain to be satisfied before the Secretary can send his recommendations to the President: (1) The Wilderness Act requires that public hearings be held on the proposed recommendations, and (2) FLPMA requires that "prior to any recommendations for the designation of an area as wilderness the Secretary shall cause mineral surveys to be conducted by the Geological Survey and the Bureau of Mines to determine the mineral values, if any, that may be present in such areas." (The latter requirement applies only to areas recommended as "suitable" for wilderness designation.)

These requirements will be met as soon as possible after publication of this Desert Plan, and the Secretary will then send his recommendations to the President. The wilderness study areas in the California Desert will continue to be managed under BLM's Interim Management Policy for Lands Under Wilderness Review until Congress has either designated the area as wilderness or determined that the area will not be designated as wilderness.

c. Interim Management

Congress will make the final determination on which areas will be included in the National Wilderness Preservation System. Until that decisions is made, the BLM will manage all WSAs in the CDCA as directed by FLPMA, Section 603; that is, "so as not to impair the suitability of such areas for preservation as wilderness," as prescribed in the Interim Management Policy guidelines. Excerpts from these guidelines are printed on the back of Map No. 1, "Interim Plan," in the back cover pocket of this document. Mineral and grazing uses will be allowed to continue in the manner and degree in which they were being conducted on the date of approval of the Act, even if such use would impair wilderness suitability. The BLM is directed to prevent unnecessary or undue degradation of the lands and their resources, and to afford environmental protection. Valid existing rights must be recognized in the management of these areas.

During the interim management period, from September 21, 1976, until Congress acts, implementation of the Desert Plan in those WSAs which have been recommended for management in Multiple-Use Classes L, M, and I will be constrained by the fact that many uses allowed in those classes would impair wilderness suitability. In addition, implementation of the Desert Plan in Multiple-Use Class C areas requires Congressional action on recommended areas since wilderness interim management policy prohibits the implementation of wilderness management measures solely because the lands are under wilderness review. Existing uses may only be restricted if it is determined that such uses are impairing wilderness suitability or to minimize damage to other resources. In recognition of the special management situation posed by wilderness interim management, a new multiple-use class, Class WSA, was established since the Draft. All WSAs designated by the State Director in March 1979, fall under this interim classification (see either Map No. 1 or 11 for location of WSAs). The Bureau's Interim Management Policy for Class WSA would remain in effect until Congress makes a final wilderness determination on each WSA.

The overall management of the WSAs will be as outlined under the Interim Management Policy guidelines or in accordance with the guidelines of the multiple-use class within which each WSA falls, whichever is more restrictive. Since the Multiple-Use Class C guidelines will be deferred during the interim management period, areas so designated will be managed in accordance with Class L guidelines, in conjunction with the Interim Management Policy. The Class L guidelines will be used for interim management of the Class C areas, since the Multiple-Use Class L designation would become immediately effective should Congress not officially designate these areas as wilderness.

In summary, until Congress makes a final determination on wilderness:

1) all Class C WSAs will be managed according to Class L guidelines;

2) all Class L areas will be managed according to Class L guidelines unless WSA interim management is more restrictive.

3) all Class M and I WSAs will be managed according to Interim Management Policy (see Map No. 1);

d. After Congressional Designations

Those WSAs designated as wilderness by Congress will be managed in accordance with the provisions of the 1964 Wilderness Act, the specific legislation approving wilderness designation and approved Wilderness Management Plans. These individual Wilderness Management Plans will require creative measures to structure the Bureau's actions to meet the requirements of the Wilderness Act. Generally these plans will contain actions that:

1) Maintain an enduring system of high quality wilderness.

2) Perpetuate the wilderness resource.

3) Provide, to the extent consistent with items 1 and 2, opportunities for public use, enjoyment and understanding of wilderness, and the unique experiences dependent upon a wilderness setting.

4) Maintain plants and animals indigenous to the area.

5) Maintain stable watersheds within constraints of the Wilderness Act.

6) Consider protection needs for populations of threatened or endangered species and their habitats in management of wilderness.

7) Consider accessibility to all segments of the population (including the handicapped, elderly, and underpriviledged) in the management of wilderness.

8) Consider valid nonconforming resource uses and activities in the management of wilderness so as to have the least possible adverse effect and/or wherever possible a positive effect.

Those WSAs determined by Congress to be nonsuitable for inclusion in the National Wilderness Preservation System will revert to management consistent with their multiple-use class as proposed in this Plan or, in the case of Class C areas, to management consistent with Multiple-Use Class L guidelines.

3. IMPLEMENTATION

a. Schedule and Priorities

The Bureau assumes that the Plan will be completed and signed for implementation by December 1980, thus marking the end of the study phase of the CDCA Wilderness Program. The Bureau's reporting phase will continue for a period which could legally extend to October 21, 1991, as per Section 603 of FLPMA, but which, in accordance with BLM program objectives for high priority areas should be completed by 1984.

The priority for preparation of the Wilderness Study Reports, which will be completed during the reporting phase, will be based upon the criticalness of each area recommended as suitable for wilderness designation. A determination of criticalness will involve a combination of the area's relative wilderness rating, (established during the study phase) and conflicting resource use demand for that area.

At the close of the reporting phase, the Secretary of Interior will review the Bureau's report recommendations and recommend to the President those public lands in the CDCA which he feels are suitable and nonsuitable for wilderness preservation. Within two years of that time, the President will make his recommendations to the Congress, which, it is assumed for planning purposes, will act within one year.

During the period between Plan approval and official wilderness designation by Congress, the Interim Management Policy guidelines will be in effect, in conjunction with the more restrictive multiple-use class guidelines where applicable.

The Wilderness Study Reports which will be developed for each WSA recommended as suitable for wilderness designation will specifically address the motorized vehicle access needs to each of these areas. Approved routes of travel, when designated, will provide sufficient and suitable routes for gaining access to the wilderness resource while eliminating routes and uses which would adversely affect wilderness values. In some cases, permanent routes of travel will be approved to provide access to proposed wilderness areas. These "wilderness access corridors" will be consistent with wilderness objectives in every case, and will be established outside the wilderness areas to which they provide access. All of these will be incorporated in reports proposing wilderness legislation.

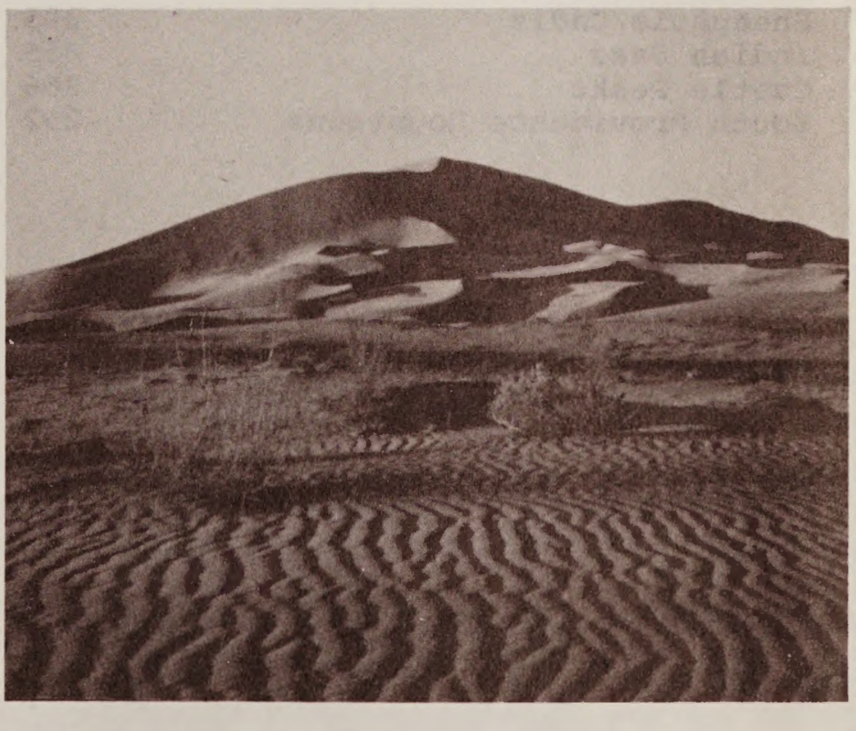
It is also recognized that military aircraft training and testing activities in the California Desert are an important part of the National Defense System of the United States. The overflights of military aircraft at low levels over recommended Class C areas is expected and this intrusion on Desert wilderness values is not considered sufficiently detrimental to warrant an nonsuitability recommendation. Therefore, in submitting these Class C recommendations to Congress, the Bureau recommends that in the Congressional action establishing these wilderness areas these intrusions be considered.

b. Monitoring

Monitoring for resource protection is of highest priority. During the period preceeding Congressional action, while WSA interim management is in effect, resource condition site surveys and environmental assessments of actions proposed within WSAs will be conducted to assure compliance with the Interim Management Policy and multiple-use class guidelines.

Those areas designated as wilderness by Congress will undergo periodic resource condition site surveys and visitor-use surveys in accordance with approved Wilderness Management Plans.

Mopah Springs - Turtle Mountains



Kelso Dunes

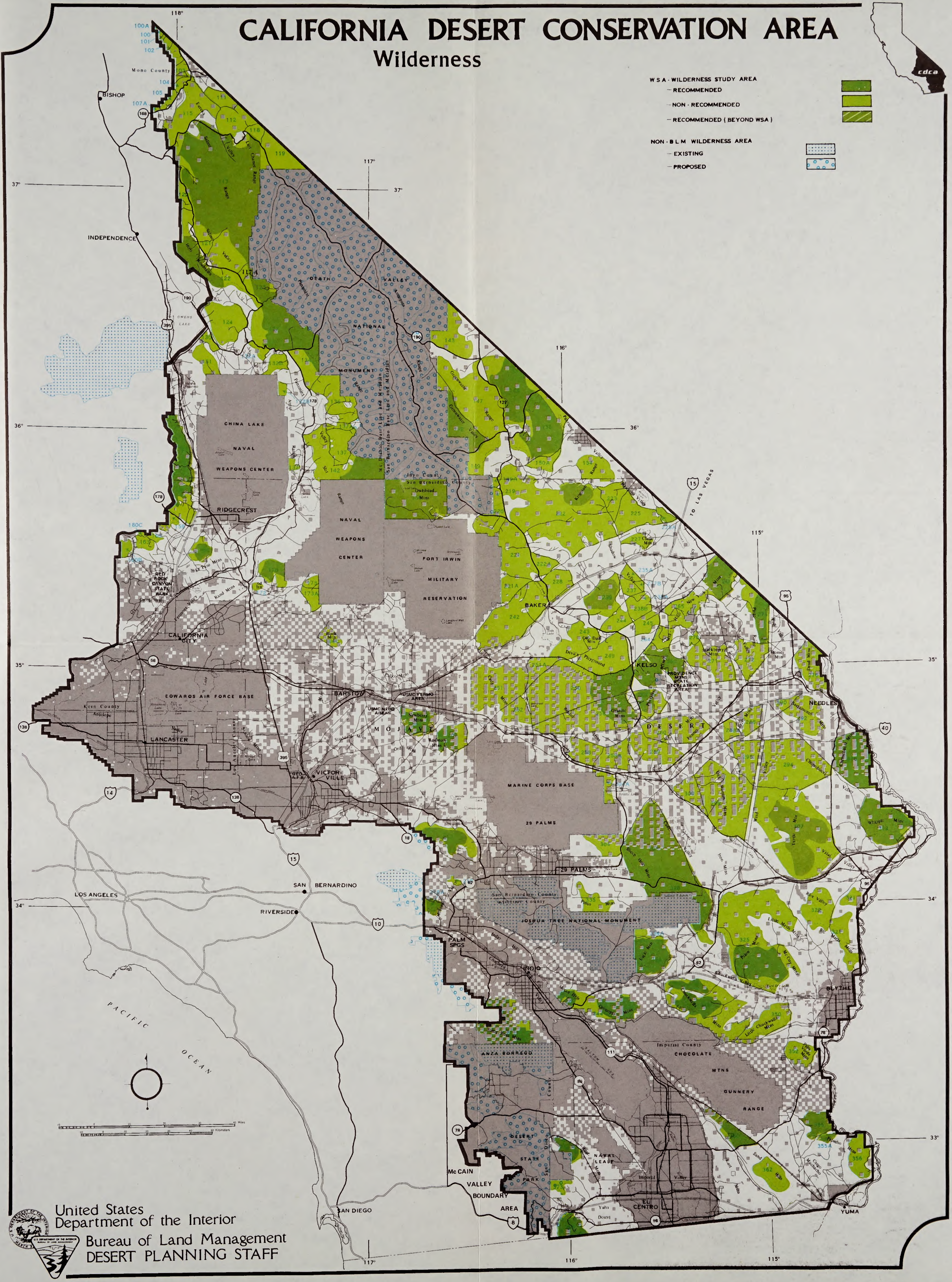
Table W-1

43 Wilderness Study Areas of Which All or Portions Are Recommended for Designation

NAME	WSA #
Saline Valley	117
Lower Saline Valley	117A
Hunter Mountain	123
Golden Valley	170
Santa Rosa Mountains	341
In-Ko-Pah Mountain	368
Kingston Range	222
Panamint Dunes	127
Whipple Mountains	263
Providence Mountains	263
Whitewater	218A
Kelso Dunes	250
Greenwater Valley	148
Slate Range	142
Turtle Mountains	307
Owlshead Mountains	156
Nopah Range	150
Chemehuevi Mountains	310
North Algodones Dunes	360
Inyo Mountains	122
Coxcomb Mountains	328
Wildrose Canyon	134
Bighorn Mountains	217
Picacho Peak	355A
Resting Spring Range	145
Fish Creek Mountains	372
Bristol/Granite Mountains	256
Owens Peak	158
Palen/McCoy	325
Fort Piute	267
Eagle Mountains	334
Newberry Mountains	206
Cinder Cones	239
Little Lake Canyon	157
Rodman Mountains	207
Chuckwalla Mountains	348
Orocopia Mountains	344
Mecca Hills	343
El Paso Mountains	164
Sheephole/Cadiz	305
Indian Pass	355
Castle Peaks	266
South Providence Mountains	262

CALIFORNIA DESERT CONSERVATION AREA

Wilderness



WSA - WILDERNESS STUDY AREA
— RECOMMENDED
— NON - RECOMMENDED
— RECOMMENDED (BEYOND WSA)
NON - BLM WILDERNESS AREA
— EXISTING
— PROPOSED
cdca
118°
117°
116°
115°
37°
36°
35°
34°
33°
BISHOP
INDEPENDENCE
Mono County
DEATH VALLEY NATIONAL MONUMENT
CHINA LAKE NAVAL WEAPONS CENTER
NAVAL WEAPONS CENTER
FORT IRWIN MILITARY RESERVATION
RIDGECREST
RED ROCK CANYON STATE PARK
CALIFORNIA CITY
EDWARDS AIR FORCE BASE
LANCASTER
BARSTOW
MOJAVE
DESERT
VICTORVILLE
BAKER
KELSO
PROVIDENCE MTNS STATE RECREATION AREA
NEEDLES
MARINE CORPS BASE 29 PALMS
29 PALMS
JOSHUA TREE NATIONAL MONUMENT
PALM SPGS
INDIO
BLYTHE
CHOCOLATE MTNS GUNNERY RANGE
ANZA BORREGO DESERT STATE PARK
McCAIN VALLEY BOUNDARY AREA
EL CENTRO
YUMA
SAN BERNARDINO
RIVERSIDE
LOS ANGELES
SAN DIEGO
PACIFIC OCEAN
TO LAS VEGAS

United States
Department of the Interior
Bureau of Land Management
DESERT PLANNING STAFF

F. Wild Horse and Burro Element

FINDING

Wild horses and burros are protected by Federal law, which declares these animals an integral part of the public land resources. Positive proper management by BLM is required to achieve and maintain population levels which ensure healthy herds and animals and to maintain a thriving natural ecological balance through reduction or elimination of conflicts now creating severe adverse impacts on other highly valued natural resources, especially wildlife.

ELEMENT OUTLINE

1. GOALS
2. ACTIONS PROPOSED
   a. Summary of Actions Proposed
   b. How Actions Differ from Draft
3. IMPLEMENTATION
   a. HMAPs: Descriptions and Priorities
   b. Monitoring
   c. Limitations During Interim Management

1. GOALS

The following specific goals are proposed to comply with the directives of law and policy regarding wild horses and burros, and to address public concern about their potential for damaging other resources. These goals are designed to reduce conflict where other high resource values occur and to intensively manage wild horses and burros in areas where low or moderate conflicts with other resources occur. The intent of this goal is to emphasize management of wild horse and burro herds rather than merely putting additional restrictions on their behavior. The objectives are to:

a. Provide for the year-long food requirements of wild horses and burros by reserving sufficient forage to meet the biological requirements of a specified number of animals.

b. Provide adequate cover for wild horses and burros by maintaining free access to existing cover for these animals. Attainment of this objective would be consistent with the need to restrict wild horse and burro use from selected riparian areas, when required to protect other resource values.

c. Provide adequate water to meet the year-long requirements of wild horses and burros by improving existing waters, developing new waters, and developing alternative waters when wild horses and burros must be excluded from an existing water.

d. Provide adequate living space for wild horses and burros by designing new structures or modifying existing structures in such a manner as to allow for the normal distribution and movement patterns of these animals. The key to attainment of this objective is preservation of the home ranges established by a majority of wild horses and burros in individual Herd Management Areas (HMAs). Attainment of this objective would be consistent with the need to restrict wild horse and burro access in selected areas to protect other resource values.

e. Protect wild horses and burros on public lands by conducting surveillance to prevent unauthorized removal or undue harassment of the animals.

2. ACTIONS PROPOSED

a. Summary of Actions Proposed

Proposed management actions are based upon inventory data on existing conditions and trends and management programs with a demonstrated utility for wild horse and burro management. In 1975, the BLM began removing excess wild horses and burros from the CDCA. While the CDCA plan was being prepared a total of 1,110 excess animals were removed under the guidance of interim Herd Management Area Plans (HMAPs). These animals have been placed under private maintenance agreements through BLM's Adopt-a-Horse Program.

Twenty two wild horse and burro areas, some containing both types of animals, were identified within the Desert during CDCA inventories. Populations of wild horses and burros will be protected and managed in 17 Herd Management Areas (HMAs) and eliminated in the 5 other areas where major conflicts exist with natural and wildlife resources. Herd Management Area Plans (HMAPs) will be prepared for these HMAs which will provide specific direction for managing the animals in accordance with applicable law and the wild horse and burro objectives identified in this element. The amount of forage allotted to wild horses and burros within

HMAs totals 26,447 Animal Unit Months (AUMs). These AUMs can support a total of 281 wild horses and 2,747 burros. Implementation of the Plan will require removal of approximately 10,100 wild horses and burros through 1985. Table WHB-1, immediately following the narrative discussing the element, summarizes proposed actions for each HMA.

b. How Actions Differ from Draft

In the draft plan alternatives all HMPs remained as units for further management and only the population levels of the HMAs varied between the alternatives, depending on the mixture of the multiple-use classes. This method has been eliminated in favor of a more biologically sound approach for the proposed Plan. This approach focuses upon the wild horse and burro concentration areas and competitive resources within the wild horse and burro areas. The concentration areas occur where, during most years, wild horses and burros tend to congregate and a high probability of encountering the herds is expected. If populations are maintained at appropriate levels in the concentration areas, more than adequate forage is expected to exist for that population level throughout the remainder of the wild horse and burro area.

The process for determining proposed population levels included delineation of the concentration areas; estimation of the areas' carrying capacities; and review of these carrying capacities by wildlife biologists, archeologists, and Native American resource specialists. These individuals provided recommended levels of wild horse and burro populations based on the resources known to occur within the concentration areas. Equal consideration was given to both livestock and wild horses and burros for allocation of forage where HMAs were within grazing allotments. (See Appendix XII for further discussion and rationale of proposed population determinations.)

Concurrent to the above review, wildlife biologists identified management prescriptions required to eliminate conflicts with the wildlife resource. These prescriptions will be acted upon in the development of Wild Horse and Burro HMAPs. An example of a management prescription would be development of waters away from sensitive areas, such as those important to bighorn sheep. (For detailed discussion see Appendix XII.) If management prescriptions could mitigate the resource conflicts, then this option was chosen above the elimination of the entire herd. Table WHB-1 shows updated population estimates for all HMAs with proposed population levels based upon recommendations of the other resource disciplines.

In accordance with Bureau policy, no forage will be allocated to wild horses and burros on lands other than public lands. There are a few exceptions to this; one being on the Naval Weapons Center where the BLM has livestock grazing administration responsibilities and an initial allocation was recommended for management consideration until the Naval Weapons Center completes its own wild horse and burro HMAP. Another exception is the Coyote Canyon wild horse herd, located in Anza-Borrego State Park, where public lands within the HMA are under application for transfer to the Park. Also, no forage users were identified, i.e. livestock and wildlife, in this HMA, so all forage was allocated to wild horses. If cooperative agreements cannot be obtained with agencies in the Kramer and Chocolate/Mule HMAs there may be slight reductions in the proposed populations based on the percentage of public lands. In herd areas which include private land, forage may be provided for the wild horses and burros on the private land by cooperative agreement.

3. IMPLEMENTATION

a. HMAPs: Descriptions and Priorities

Six HMAPs will be prepared to outline long term management for the 17 HMAs where wild horses and burros will be retained on a continuing basis. HMAs were grouped for inclusion under a particular HMAP, based upon HMAs located within the same general location and/or HMAs requiring coordination with other agencies.

HMAPs will identify the objectives for wild horse and burro management and the specific management techniques which will be used to attain the objectives. These objectives and management techniques will be designed to improve or enhance the wild horse or burro population and their habitat. Objectives and management techniques for wild horse and burro populations will be designed to improve the condition of the animals and enhance the population's age structure/sex ratio to maintain a viable herd and at the same time minimize the need for removing excess animals. Objectives and management techniques for wild horse and burro habitat will be designed to improve or enhance the habitat requirements of food, cover, water, and living space and to preserve the free-roaming behavior of the animals.

Preparation of HMAPs has been prioritized according to the level of resource conflicts found within the HMAs. Each interim HMAP will be amended to conform with the guidelines of the proposed Plan. If the proposed level of animals stated in the interim HMAP is greater than that specified in the proposed Plan, gathering will proceed as scheduled while the final HMAP is being prepared. The high priority HMAPs will be prepared and implemented beginning in fiscal year (FY) 81 with the proposed population levels reached by the end of FY 85. The medium priority HMAPs would be prepared and put into effect by

FY 82 with proposed population levels reached by the end of FY 85. Low priority HMAPs will be prepared and put into effect by FY 83 with the proposed population level reached in that same year.

The highest priority HMAP is the Saline/Panamint Valley HMAP. This plan contains the Waucoba-Hunter Mountain, Lee Flat, and Panamint Valley HMAs. By the end of FY 85, 3,065 burros and 200 horses will be gathered.

Another high priority HMAP is the Centennial Valley HMAP. This plan will involve the Centennial Valley and Slate Range HMAs. The HMAP will be written cooperatively with the China Lake Naval Weapons Center. An estimated 80 percent of the burros and horses are residents of the Weapons Center. Approximately 4,565 burros and 635 horses will be captured by the end of FY 85. The weapons center is expected to supply an equivalent percentage of funds for the roundup.

The Yuma, Arizona BLM District has the lead for writing and implementing the Colorado River HMAP. The newly created California Desert District will provide partial funding and manpower. Yuma plans to implement and lower the population to the proposed level in FY 81. The Colorado HMAP contains the Dead Mountain, Chemehuevi, Chocolate/Mules, and Picachos HMAs.

The East Mojave HMAP is a medium priority management area. The HMAP contains the Clark Mountain, Lava Beds, Granite-Providence Mountains, Woods-Hackberries Mountains, Cima Dome, and Piute Mountains HMAs. This HMAP will be completed by the end of FY 81. The proposed population level of 180 animals will be reached by no later than the end of FY 85. If a constant rate of removal is provided, then 1,328 animals would be moved and adopted during the four-year period.

The Chicago Valley HMAP is a low priority plan. The plan contains the Chicago Valley, Sand Springs and Piper Valley HMAs. This HMAP will be written and the proposed number of animals attained by FY 83. Approximately 150 wild horses and burros will be gathered.

The Low Desert HMAP is also a low priority plan. All of the HMAs managed under this HMAP consist of very small populations of wild horses and burros. The HMAs to be managed under this HMAP are Kramer, Morongo, Palm Canyon and Coyote Canyon. By FY 83, the HMAP will be written and reduction to proposed numbers completed during the same year. By delaying the gathering of excess animals in these areas, approximately 40 animals will have to be gathered.

In summary, attainment of the population levels identified in the proposed Plan will require removal of approximately 10,100 wild horses and burros through FY 85 from an estimated current population of 11,172 animals. Since the animals will be gathered over a period of time, the total number of animals gathered to reach the proposed population level will be greater than existing levels due to an estimated annual increase of 10 percent. The estimated cost of this effort is in excess of $3 million.

A capture plan will be prepared whenever wild horses or burros are removed from public lands. Such plans will be prepared to include the total area affected by a specific gathering effort and will conform to the objectives of the available HMAP. Capture plans will contain a description of and rationale for the proposed gathering effort. The plans will outline the specific capture techniques, types of holding facilities, and transportation techniques to be used. Capture plans will be changed or updated when significant changes in the capture program are proposed.

Significant public concern was expressed during the review of the Draft Plan Alternatives about the need to reach proper burro levels as soon as possible. Most comments indicated that continued severe impacts on sensitive natural resources would be unacceptable.

This proposed plan requires the removal of excess burros to reach the specified level of 2,747 burros through 1985. This will be accomplished through a program of humane roundup, capture and adoption to qualified individuals. BLM will diligently promote this program and seek out adoptors for burros.

In addition, the current programs of research into population limiting measures such as sterilization will be closely monitored, and these techniques will be used in the future if they are developed and are cost efficient, although this will not help initial reduction of existing populations.

Every effort will be made to obtain appropriations to carry out this program. BLM also provides for reimbursable charges to adoptors to pay for veterinary fees, shots, feed, and transportation costs for burros rounded up and being held for adoption. If this is not adequate for roundup and adoption of excess animals, BLM can accept contributions from concerned organizations to help pay for the cost of roundup and adoption programs.

A key question raised in public comment on the Draft Plan Alternatives and EIS was: what would be done if excess burros, seriously negatively affecting a thriving natural ecological balance, rare and sensitive plants and wildlife; would not be immediately rounded up as proposed with means available?

If this occurs, in situations where roundup actions prove to be futile because of extreme conditions of topography or vegetation, or if an adoption demand by qualified individuals does not exist; excess burros may be destroyed on the range in the most humane and cost efficient manner possible in accordance with the Wild Horse & Burro Act (as amended) in order to meet the objectives of the Plan and the Law.

If wild horses and burros become established in areas outside of the HMAs identified in this proposed Plan, these animals will be removed in a timely manner without the need for an additional HMAP.

During the development of HMAPs, additional information may affect the proposed wild horse and burro population numbers. If the HMAP's population level is significantly different (±20 percent) than the population level proposed in this Plan, the Plan amendment process will be undertaken to insure the objectives of this Plan are met.

Protection of wild horses and burros on public lands will be provided through vehicular patrols of the Desert by Desert Rangers and other BLM employees. These patrols will be conducted for the purpose of detecting unauthorized capture, removal, and/or destruction of wild horses and burros on public lands. In most instances the patrols will be performed as a part of routine visits to HMAs. Additional protection will be provided by aerial flights over HMAs. These flights will be conducted whenever required to respond to reported violations of the Wild, Free-Roaming Horse and Burro Act as well as on a nonpublicized periodic basis. All confirmed violations of the Wild Horse and Burro Act will be investigated in a timely manner by a BLM special agent.

b. Monitoring

As a part of the development of individual Herd Management Area Plans, a monitoring system will be designed to evaluate the effectiveness of the HMAP management techniques in meeting the objectives of the HMAP. These studies will also be used to design and evaluate schemes of selective animal removal. As a minimum, the following monitoring studies will be used:

ESTIMATE POPULATION NUMBERS

Population estimates will be developed once each year (beginning the first year following HMAP preparation) to monitor progress in obtaining proposed population levels within the target dates. Additional population estimates will be developed periodically, but no less than once every five years after proposed population levels have been obtained to monitor population trends.

MONITOR DISTRIBUTION AND MOVEMENT PATTERNS

Distribution and movement patterns will be monitored seasonally for at least three years. When possible, fixed wing aircraft will be used to monitor these patterns.

MONITOR POPULATION DYNAMICS

Sample composition counts (youth/adult ratios) will be conducted on ten percent of the HMAs annually to estimate reproductive capacity of wild horse and burro populations. Sample sex ratio classifications will be made on five percent of the HMAs annually to estimate fecundity rates. In addition, sex ratio data will be collected from captured animals (by HMA) to estimate wild horse and burro survival rates. In addition, age structure data will be collected from carcasses found on the range.

DETERMINE THE SEASONAL DIETS

Fecal analysis studies will be conducted four times each year, for a minimum of one year, to determine the seasonal diets of wild horses and burros. Fecal material will be collected to be representative of the four major seasons of the year.

MONITOR VEGETATION

Additional monitoring of the wild horse and burro habitats will be conducted in each HMA using applicable standards identified under the Livestock Grazing Element of this Plan.

ADJUSTMENTS BASED ON MONITORING

Once herds have reached the population levels prescribed in the HMAPs, upward or downward adjustments in the proposed levels of wild horses and burros will be made when the monitoring systems show that the wild horse and burro habitat or other sensitive resources are not being adequately protected as described in the HMAPs.

In addition, the management techniques or objectives in the HMAPs may be adjusted through analysis of monitoring studies.

If these adjustments are plus or minus 20 percent of the recommended population level in the proposed Plan, the Plan Amendment Process will be undertaken to insure the objectives of this Plan are met.

c. Limitations During Interim Management

Management of WSAs will limit some aspects of wild horse and burro management.

For example, temporary water developments and fences (corrals, traps) may be installed if they satisfy the nonimpairment criteria. New water developments or fences may be installed if the following criteria are met:

. Motorized access will not be required for maintenance if the area was designated as wilderness;

. Improvements are substantially unnoticeable in the WSA as a whole;

. After any needed reclamation is complete, the area's wilderness values must not have been degraded so far as to impair the area's suitability for preservation as wilderness.

For construction of approved range improvements, cross-country use of motor vehicles or construction of temporary access routes may be approved if BLM has determined that they satisfy the nonimpairment criteria (specific guidelines for range improvements can be found in the Interim Management Policy and Guidelines for Lands under Wilderness Review).

Motorized access for the purpose of wild horse and burro management (maintenance of facilities, transportation of captured animals) may be permitted on existing access routes. Cross-country motorized access may be authorized along routes specified by the BLM if it satisfies the nonimpairment criteria, including reclamation requirements; no grading or blading will be permitted. Temporary roads may be built if the BLM has determined that they satisfy the nonimpairment criteria.

Helicopters used for capture or inventory work may land on existing airstrips, heliports, and helispots and on unimproved sites. Facilities for temporary landings may be built if they satisfy the nonimpairment criteria.

Table WHB-1

Proposed Wild Horse and Burro Management

Herd Management Area	Approximate Acres	Approximate Percentage Land Ownership		Estimated Current Populations		Proposed Populations		Proposed Herd Management Area Plan	HMAP Priority
		Public Lands	Other	Horses	Burros	Horses	Burros		
Waucoba/Hunter Mt.[1]	598,000	100		200	1,540	0	444	Saline/	
Panamint [2]	851,000	50	50		1,270		240	Panamint	High
Lee Flat [8]	115,000	100			30		30	HMAP [11]	
Centennial [3]	920,000	20	80	600	3,684	168	1,137	Centennial/	
Slate Range	391,000	20	80		840		408	Slate HMAP[12]	High
Clark Mtn.	173,100	100			365		44		
Lava Beds [4] [8]	178,500	100			75		75		
Granite/Providence	136,500	100			420		0	East	
Woods/Hackberry [8]	39,400	50	50	12	170	6	0	Mojave	Medium
Cima Dome [5]	69,000	100			55		55	HMAP	
Piute Mtn. [16]	30,100	100			55		0		
Dead Mtn. [9]	48,600	60	40		55		0		
Chemehuevi [10]	391,000	85	15		1,200		150	Colorado	
Chocolate/Mules [6]	333,000	75	25		230		22	River	Medium
Picacho	40,000	95	5	45		42		HMAP [13]	
Piper Mountain	69,000	100		44	150	17	82	Chicago [14]	
Sand Spring/Last Chance	230,000	100			0		0	Valley	Low
Chicago Valley [7] [8]	276,000	95	5	28	28	28	28	HMAP	
Kramer	13,800	60	40		25		16		
Morongo [8]	39,100	65	35		25		16	Low	
Palm Canyon	11,500	30	70	6		0		Desert	Low
Coyote Canyon	20,700	20	80	20		20		HMAP [15]	
Total				955	10,217	281	2,747		
Total AUMs				11,460	85,823	3,372	23,075		

[1] Includes Saline HMA from Draft Plan.

[2] Include Towne Pass HMA from Draft Plan.

[3] Includes Darwin, Trona, and Coso Basin HMAs from Draft Plan.

[4] Name changed from Indian Spring HMA in the Draft Plan.

[5] Includes Marl Springs and Cut Springs HMAs from Draft Plan.

[6] Includes Milpitas Mtn., Picacho, and a portion of Chuckwalla HMAS from Draft Plan.

[7] Includes Ash Meadows HMA from Draft Plan.

[8] The HMA contains no identified resource conflicts and adequate forage exists for a potential increase in popultions. The HMAP should address opportunities for adjustments in proposed populations through monitoring of vegetation and other resources and should also examine existing and potential waters. The initial recommendation is at existing populations.

[9] Majority of the land in the Concentration Area is on the Fort Mojave Indian Reservation, where zero burros are desired.

[10] Tentative number in this HMA negotiated with the Chemehuevi Indian tribe, Yuma and Riverside Districts.

[11] The preparation of this HMAP should be coordinated with Death Valley National Park.

[12] These numbers, both the existing populations and proposed populations are preliminary and will be adjusted based on information currently being gathered and analyzed by the Naval Weapons Center, China Lake for the Wild Horse and Burro Management Area Plan and Enviormental Statement for those lands within the boundaries of the Naval Weapons Center The HMAP for Wild Horses and Burros on Public lands surrounding the Naval Weapons Center will be developed in cooperation with the Navy since their policy may influence BLM's management of the herds on these surrounding lands.

[13] Yuma Distant has taken lead responsibility in HMAP preparation and proposed numbers may differ based on site specific analysis.

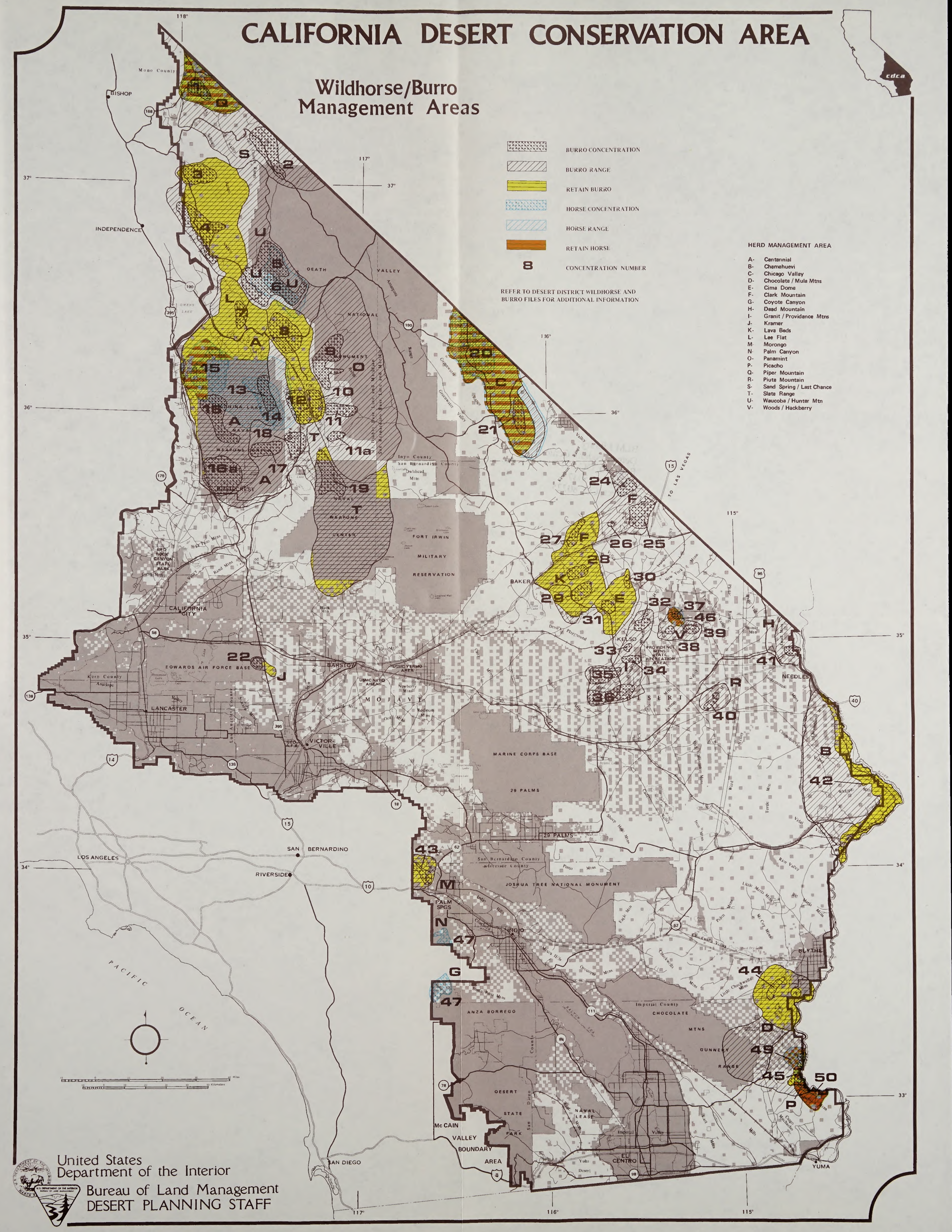
[14] This HMAP should be written cooperatively with Las Veges District.

[15] The HMAP should be written in cooperation with Edwards Air Force Base, Anza-Borrego State Park, and those Indian tribes affected by excnange of animals.

[16] Proposed populations at zero to provide all forage and space to bighorn sheep in this area.

[17] See Appendix XII for procedure for determination of proposed populations. Any deviation has been footnoted and briefly explained above.

[18] The estimated current populations may have varied from that stated in the Draft Plan this is due to normal population increases, combining HMA's, reduction in numbers due to roundups, or revised estimates. See Appendix XII for detailed discussions.


118°
117°
116°
115°
37°
36°
35°
34°
33°
Mono County
BISHOP
INDEPENDENCE
OWENS LAKE
DEATH VALLEY NATIONAL MONUMENT
NAVAL WEAPONS CENTER
RIDGECREST
FORT IRWIN MILITARY RESERVATION
Inyo County
San Bernardino County
BAKER
KELSO
PROVIDENCE MTNS STATE RECREATION AREA
NEEDLES
TO LAS VEGAS
RED ROCK CANYON STATE PARK
CALIFORNIA CITY
EDWARDS AIR FORCE BASE
Kern County
LANCASTER
BARSTOW
USMC YERMO AREA
USMC NEBO AREA
MOJAVE DESERT
VICTORVILLE
GEORGE AFB
MARINE CORPS BASE 29 PALMS
29 PALMS
SAN BERNARDINO
LOS ANGELES
RIVERSIDE
Riverside County
JOSHUA TREE NATIONAL MONUMENT
PALM SPGS
INDIO
BLYTHE
SALTON SEA
Imperial County
CHOCOLATE MTNS
GUNNERY RANGE
ANZA BORREGO DESERT STATE PARK
NAVAL LEASE
McCAIN VALLEY BOUNDARY AREA
SAN DIEGO
EL CENTRO
YUMA
PACIFIC OCEAN
Miles
Kilometers
cdca
Q S 2 3 4 U 5 6 U L 7 8 A 9 O 15 13 10 16 14 A 12 11 18 T 11a 16a 17 A 19 T 20 C 21 24 F 27 F 26 25 28 K 30 29 E 31 32 37 46 V 39 38 33 I 34 35 36 22 J H 41 R 40 B 42 43 M N 47 G 47 44 D 49 45 50 P

CALIFORNIA DESERT CONSERVATION AREA

Wildhorse/Burro Management Areas

- ▨ BURRO CONCENTRATION
- ▨ BURRO RANGE
- 🟨 RETAIN BURRO
- ▨ HORSE CONCENTRATION
- ▨ HORSE RANGE
- 🟧 RETAIN HORSE
- 8 CONCENTRATION NUMBER

REFER TO DESERT DISTRICT WILDHORSE AND BURRO FILES FOR ADDITIONAL INFORMATION

HERD MANAGEMENT AREA

A-	Centennial
B-	Chemehuevi
C-	Chicago Valley
D-	Chocolate / Mule Mtns
E-	Cima Dome
F-	Clark Mountain
G-	Coyote Canyon
H-	Dead Mountain
I-	Granite / Providence Mtns
J-	Kramer
K-	Lava Beds
L-	Lee Flat
M-	Morongo
N-	Palm Canyon
O-	Panamint
P-	Picacho
Q-	Piper Mountain
R-	Piute Mountain
S-	Sand Spring / Last Chance
T-	Slate Range
U-	Waucoba / Hunter Mtn
V-	Woods / Hackberry

United States
Department of the Interior
Bureau of Land Management
DESERT PLANNING STAFF

G. Livestock Grazing Element

FINDING

Currently and historically, livestock grazing is a significant use of renewable resources on public lands in the California Desert. The Federal Land Policy and Management Act of 1976 (FLPMA) and the Public Rangelands Improvement Act of 1978 recognize livestock grazing as a principle use for the production of food and fiber. Pursuant to decision in National Resource Defense Council, Inc. v. Morton (388 F Supp 829, 1974; 527 F 2d 1386, 1976), livestock grazing on public land has been judged to be a major environmental action requiring an Environmental Impact Statement (EIS) mandated by National Environmental Policy Act (NEPA).

ELEMENT OUTLINE

1. GOALS
2. ACTIONS PROPOSED
   - a. Summary of Actions Taken
   - b. Summary of Actions Proposed
   - c. Detail of Actions
     - 1) Perennial Range Type
       - Carrying Capacity
       - Allocations
       - Range Condition
     - 2) Ephemeral
     - 3) Ephemeral / Perennial Range Type
     - 4) New Proposed Allotments
     - 5) Management Prescriptions
     - 6) Changes in Approach from Draft
3. IMPLEMENTATION
   - a. Assumptions
   - b. Decisions
   - c. Allotment Management Plans
   - d. Monitoring
   - e. Consultation Process
   - f. Limitations During Interim Management

1. GOALS

The goals of the Livestock Grazing Element are to:

a. Continue the use of the California Desert for livestock production to contribute to the need for food and fiber from public land.

b. Use livestock grazing as a tool to change or improve vegetation for meeting livestock needs as well as other management objectives set forth in the Plan.

c. Maintain lands that are in good to excellent condition at these production levels. Those lands at poor to fair condition will be improved by the application of appropriate management prescriptions to regulate livestock grazing within the framework of multiple use and sustained yield.

d. Improve vegetation use by improving better distribution of livestock through the use of range improvements and specific management prescriptions which will be fully developed and implemented with Allotment Management Plans (AMPs).

e. Conduct specific monitoring procedures of condition and trend to determine the necessary grazing adjustments to meet management goal.

2. ACTIONS PROPOSED

a. Summary of Actions Taken

Domestic livestock has been grazed in the California Desert for more than 100 years. Both the acreage and the intensity of livestock use on Federal land in the California Desert have continually declined during this century. Lands formerly grazed on the western edge of the Desert have passed into private ownership and are no longer available for public leases or permits. In recent years, recreational use, particularly that of off-road motorized vehicles, has further impacted range on the western fringe, resulting in additional livestock management problems and decreasing forage production potential. The rapid expansion of wild burro populations since their protection under the Wild Horse and Burro Act of 1971 has caused intense conflicts for forage in some areas.

Currently, 4.5 million acres (36 percent of public lands in the CDCA) in 53 grazing allotments are being leased to cattle and sheep interests. An estimated $290,000 in grazing fees were collected in 1979. Approximately 75,000 sheep and 14,000 cattle obtain all or part of their sustenance from the California Desert. Sheep grazing is generally intermittent, while use by cattle may be continuous or intermittent, depending on the locality and type of ranching operation, as well as the pattern of annual rainfall.

b. Summary of Actions Proposed

This Plan proposes:

1) the allocation of 13,804 animal unit months (AUMs) of perennial forage for livestock use on 13 existing allotments designated as perennial,

2) the allocation of 60,903 AUMs of perennial forage for livestock use on 21 existing allotments designated as ephemeral/perennial, plus additional livestock use of ephemeral forage (as it becomes available), and

3) the allocation of ephemeral forage on 20 existing ephemeral allotments (as it becomes available). The 5 year average in the CDCA was 45,249 AUMs.

The perennial forage allocation amounts to a 25 percent decrease of existing preference. These allotments comprise 4,509,728 acres of public land (36 percent) within the CDCA and proposed livestock allocation will be 74,707 AUMs. This Plan also allows livestock grazing on 15 proposed allotments, which includes the extension of the boundaries of 8 existing allotments, totalling 479,039 acres of the public land (4 percent) within the CDCA or up to 6,217 AUMs.

Range improvements which will promote the more efficient use of the forage resource include an estimated 327 miles of fence, 220 miles of water pipeline, 61 wells, 58 spring developments, 29 catchments, and 153 troughs.

Season of use will be clarified and/or adjusted in 21 allotments in order to improve range and vegetation condition and to satisfy wildlife resource needs. A summary of proposed range improvements by allotment is included in Appendix XIII. Detailed actions are presented on Table LG-1, following the narrative of this element. A summary of these actions proposed is presented on Table LG-2, following LG-1. The location of existing and proposed allotments is shown on Map No. 13, following these tables.

c. Detail of Actions

Three range types, perennial, ephemeral, and ephemeral/perennial, have been identified to more effectively manage Desert grazing allotments, due to the variability in the amount, quality, and timing of forage production in the CDCA. Each of the allotments has been classified as to type and will be managed within the framework specified.

1) PERENNIAL RANGE TYPE

Perennial range type is found usually at elevations greater than 3,500 feet, or in the northern portions of the CDCA where woody shrubs and bunchgrasses are the major livestock forage. The production and growing season of the forage type is more consistent, allowing an estimate of annual production which can be used to establish allocations which require no major adjustments in annual stocking rates, except in very extreme conditions. The consistency of forage production in this range type is due to comparatively predictable winter precipitation.

Allotments classified as perennial have an AUM active preference established as a result of forage surveys, the allocation processes, and a comparison of past use to present condition. This base may be adjusted through subsequent monitoring and analysis (Appendix XIII). Use will not exceed 50 percent of the current year's growth on the key species in key areas.

Forage allocations outlined in Table LG-1 were based on consideration of data from: a) vegetation and range forage surveys; b) use records from allotments files; c) special reports and interviews; and d) forage needs for wildlife and wild horses and burros (Appendices XII and XIII. The forage survey records were considered as the most relevant type of information for establishing a baseline of the livestock carrying capacities given.

·Carrying Capacity

Carrying capacity is considered as the level of use that could take place without causing either an increase or decrease in range production over time (i.e., maintain sustained yield). All available range forage survey data, past and present, that could be located for the CDCA were assembled and evaluated in the process of arriving at the carrying capacities indicated for grazing allotments (Table LG-1 and Appendix XIII). The amount and quality of the data assembled varied from allotment to allotment. The methods used in making the forage baseline ranged from those made during initial BLM adjudication through detailed ocular reconnaissance surveys to a current desertwide multistage sampling remote sensing evaluation. Values for individual allotments obtained from these methods vary in a manner that reflects both differences in the methodology used and differences in vegetation production resulting from the weather conditions for the period of the survey. For the purposes of consistency and simplicity, the values obtained from the recent multistage sampling remote sensing survey are presented in Table LG-1 as the most current estimate of carrying capacity. The reliability of these estimates is considered to be satisfactory when reviewed in comparison with earlier survey results from common areas (Appendix XIII).

It should be noted that climatic conditions comparatively favorable to plant growth prevailed during the period of the most recent survey. As a result, the forage production during the survey period is thought to exceed the long-term average.

Forage production was extracted from the total production values through the evaluation of each plant species in terms of its proper use by livestock in a plant community setting (Appendix XIII, gives the proper use factors used). The portion of the total production considered as useable livestock forage was thus derived. The useable livestock forage values were converted to animal unit months (AUMs) by dividing the results by 450 kg (990 lbs) per AUM (AUM is equivalent to the amount of forage required by a 1000 lb cow for 1 month; Appendix XIII). The resulting AUM values were further adjusted for range suitability considerations (slope greater than 4 miles, perennial renewable livestock forage production below 25 lbs/acre, etc.).

The forage surveys used merely represent a starting point from which to adjust, after monitoring studies are evaluated. In view of the difficulties in establishing carrying capacity from survey data gathered by any means in use today, great emphasis is being placed on monitoring for determining the basis for future adjustments. These needed adjustments will be made in accordance with Bureau manuals and procedures.

- Allocations

Livestock allocations of the adjusted carrying capacity were made with considerations for competing uses (wildlife and wild horses and burros) and condition class rating (Appendix XIII).

Allocations to deer and bighorn sheep were based on the number of animals reported to be in the allotment (Appendix XIII).

In cases where wild horse and burro herd management areas overlapped grazing allotments, wild horses and burros and livestock were given equal consideration for forage allocation

To achieve the objective of promoting range condition improvement, carrying capacity estimates on those allotments rated at an average condition of fair or poor were reduced by 25 percent and 50 percent, respectively (Appendix XIII). The recommended livestock AUMs (Table LG-1) reflect the above adjustment.

Since no adjustment was made for the above average rainfall received during the survey period, capacity estimates should be considered high in most areas. As a result, when existing livestock authorizations are higher than the recommended allocation, active preference will be lowered to that level. When existing use is lower than the allowable allocation, no increases are recommended until monitoring studies verify an increase is warranted.

Adjustments in livestock use authorizations would be made as needed to correct any identified improper use of perennial forage. Allocations of additional forage identified through the monitoring procedure would follow the framework set forth in the Implementation Section of this Plan and existing Bureau procedures (Appendix XIII).

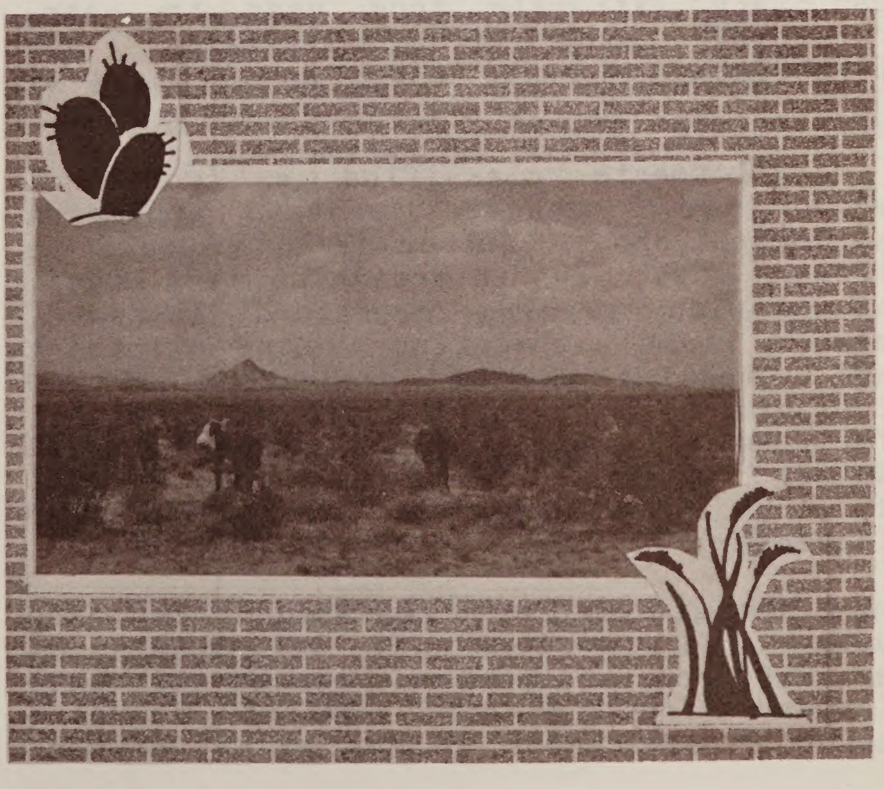
- Range Condition

The condition rating for an allotment refers primarily to the status of the composition, cover, and vigor of the vegetation relative to the natural potential of the area under consideration and, secondarily, to soil stability relative to accelerated erosion.

Certain forage plants selected from different parts of the CDCA were used as indicators for conditions by their characteristic response to grazing pressure. "Decreasers" reduce in the composition under heavy grazing pressure. "Increasers" multiply in the composition under heavy grazing pressure. When conditions appreciably deteriorate, the less desirable plants or "invader species" become more abundant (Appendix XIII).

The rankings of excellent, good, fair, and poor were assessed as follows.

Whether plant cover and species composition exhibit amounts and proportions representative of the "climax" for the areas is judged from relict areas, exclosures, fence line contrasts, and/or historical information.



Condition classes were rated as follows:

Excellent	·Similar to climax condition ·Decreasers abundant, good vigor ·Cover good for potential of site ·No accelerated erosion ·Production 75 percent and over of potential
Good	·Somewhat similar to climax condition ·Decreasers still representative of the site and vigor, but are starting to be replaced by increasers. ·Invaders, though present, are insignificant ·Cover still good for site ·Accelerated erosion very minor, but present ·Production is 50-75 percent of potential
Fair	·Decreasers show low vigor with remnant populations occurring in sheltered areas. ·Invaders are common, increasers are expanding. ·Accelerated erosion common ·Cover tending to be reduced ·Production is 25-50 percent of potential.
Poor	·Invaders and increasers predominate ·Decreasers gone or those left are in inaccessible areas.

2) EPHEMERAL RANGE

Ephemeral range types usually occur in regions below elevations of 3,500 feet where annual forbs and grasses are the major forage. Ephemeral forage production can vary extremely from year to year, requiring management flexibility in prescribing stocking rates and seasons of use.

Allotments classified as ephemeral would be managed under ephemeral authorizations. Authorizations would be issued after an interdisciplinary team, along with grazing operators involved, make a field examination of the allotment and determine whether production of 200 lbs/acre of dry weight would be available for turnout, except in highly crucial desert tortoise habitat, where 350 lbs/acre requirement is specified (Appendix XIII.)

The 200 lbs/acre requirement is based upon the professional judgment of experienced range conservationists (Appendix XIII.) The 350 lbs/acre turnout requirement in the highly crucial desert tortoise habitat is based on the recommendation of wildlife personnel (Appendix XIII.) Photographs would be taken of the production at turnout, annually, to ensure standardization. Production clip plots would be used to verify estimates. The allowable use would not exceed that which would leave an average of 200 or 350 pounds residual forage, depending on tortoise habitat classification as specified for turnout, at the end of the growing season (Appendix IX, Part 4).

3) EPHEMERAL/PERENNIAL RANGE

This range type is an intermediate type or a combination of the previous two types. Grazing of this forage would be managed by first establishing a stocking rate based on the perennial forage, and then by annually increasing that rate under the same approach as used on ephemeral allotments, according to how well the ephemeral forage responds to climatic conditions.

Some allotments currently designated as perennial are being converted to the ephemeral/perennial designation to reflect the forage types within the allotment. This conversion may affect the active preference authorized in the allotment (Table LG-1 and Appendix XIII).

4) NEW PROPOSED ALLOTMENTS

Selected historical public grazing allotments which had been used in the past but are not currently leased were reviewed as candidates for establishing grazing leases. The allotments proposed (Table LG-1) were judged using the following criteria:

a) Suitability for grazing. The allotment area must have available forage for allocation to livestock. Water availablity and slope angle must be appropriate.

b) Demand for grazing. There must be an existing demand or an anticipated demand in the future.

c) No major conflicts. Allotments were proposed only in areas where their establishment would not create a major conflict with other natural and cultural resource values. Resource conflicts were identified by a review process with other resources and were resolved by boundary changes or elimination of the entire candidate allotment (Appendix XIII).

Those lands that qualified as proposed allotments after considering the above criteria may still be restricted by Wilderness Study Areas. Proposed allotments that contain Wilderness Study Areas can not be established until Congress designates these areas as nonwilderness or approves them as wilderness with grazing.

5) MANAGEMENT PRESCRIPTIONS

In brief, the management practices proposed for meeting the objectives of the Livestock Grazing Element are the establishment of appropriate: a) stocking levels; b) seasons of use; c) turnout times based on forage readiness (plant phenology); d) levels of forage use; e) monitoring and adjustment procedures; f) watering and handling practices in high livestock concentration areas; and g) range improvements (springs, wells, catchments, pipelines, troughs, fences, etc.). The details for each allotment will be developed during the Allotment Management Plan process in the framework of the guidelines proposed here.

During preparation of this Proposed Plan, conflicting resource recommendations by specialists on specific issues were resolved by management decisions (Appendix XIII). The decisions, summarized below, and the forage allocations which were made, are according to the public interest and with due consideration to the needs of all range users.

Grazing in highly crucial desert tortoise areas will be restricted to one pass by sheep, or an Allotment Management Plan (AMP) will be developed to ensure comparable habitat protection in both cattle and sheep allotments. Bedding and watering sites will be in designated areas only. During the growing season, 350 lbs/acre of ephemeral forage will be maintained in those highly crucial areas.

When bighorn sheep and livestock conflicts are identified, Allotment Management Plans (AMPs) will be developed with the specific objective to maintain or improve bighorn numbers.

Since riparian areas are very important in Desert ecosystems, they will be either fenced with adequate water being piped out for livestock use, or used by livestock in a way to ensure that proper use levels of forage are not exceeded and that natural and cultural resource values are protected. Riparian areas would be considered as important areas for monitoring. The design for management of these areas would be specified in the AMPs and Herd Management Plans (HMPs). A more detailed consideration of these areas is found in the Vegetation Element.

6) CHANGES IN APPROACH FROM DRAFT PLAN

The approach taken in this element differs from that taken in the Draft Plan Alternatives as follows:

a. The range condition rating was used as a consideration for establishing stocking rates on poor and fair condition range so as to promote more rapid recovery toward the production potential (Appendix XIII).

b. Wild horse and burro management plans were removed from the Livestock Grazing Element and treated more specifically in a Wild Horse and Burro Element.

c. The methods used for allocating forage to wild horses and burros in grazing allotments were changed from a graduated scale dependent on multiple-use classes to a more ecologically based multiple-use procedure (Appendix XIII).

d. Vegetation production and allocation data for uses in addition to livestock inside and outside grazing allotments are discussed briefly in the Vegetation Element.

e. Public input on the Draft provided new information that was used in making corrections and redirecting emphasis.

f. The terms "existing use" (Table LG-1 Column E), "preference use", "ephemeral use", and "actual use" are clarified. Preference use refers to the preference authorization specified on current permits and leases for perennial and ephemeral/perennial allotments as defined. Ephemeral use is an approximation of the use that is occurring currently on ephemeral allotments as determined by averaging the licensed use over the last 5 years. Existing use is either or both preference and ephemeral. Actual use information implies more precision and is generally unavailable.

g. Some acreage and carrying capacity figures are different than those presented in the Draft Plan. The acreage figures changed due to corrections or changes in the allotment boundaries. Carrying capacity estimates shown in the Draft Plan differ from this Plan due to the availability of additional forage survey data.

3. IMPLEMENTATION

a. Assumptions

The following assumptions were made in preparation of the Livestock Grazing Element and must be considered before an accurate analysis of the environmental impacts can be made.

1) LIVESTOCK STOCKING RATES

As stated further in the element, carrying capacity, determined by survey methods, only serves as a starting point. It is assumed that the estimates are accurate and that livestock operators will follow their licensed use. It is also assumed that the licensed use will not result in overuse of the vegetation, except in concentration areas such as watering troughs, bedding rounds, or holding areas. When monitoring studies on key areas show over 50 percent use of key perennial species, appropriate adjustments will be made to bring it within carrying capacity.

2) AMP IMPLEMENTATION

It is assumed that all AMPs will be implemented within five years of the AMP approval. It is also assumed that AMPs will incorporate and operate under the management prescriptions resulting from conflict resolution. Again, monitoring studies would be used to evaluate the effectiveness of livestock management in maintaining the concepts of multiple use and sustained yield.

3) RANGE IMPROVEMENTS

Development of range improvements will follow the standards and guidelines set forth in the BLM manual and/or policy. This would ensure projects are technically feasible and environmentally sound.

Since exact numbers and locations of projects are not known at this time, a site-specific environmental assessment would be done prior to project layout and construction. The assessment would address the project's impact on wilderness study areas, visual resource management, listed threatened or endangered plant and animal species, wildlife, vegetation, archaeology, and economics.

b. Decisions

Following acceptance of the final CDCA Plan, grazing will be implemented in the following manner:

1) A Rangeland Management Program Document (RMPD) will be prepared and used to summarize decisions made and schedule of actions to be taken. If reductions are required, there will be continuous consultation with affected ranchers and other concerned members of the public.

2) The proposed livestock grazing decisions will be issued to the appropriate livestock operators within one year following the effective date of the final CDCA Plan. The proposed decision will allow 15 days after delivery for the operator to protest it. All decisions will become final and become effective the following grazing season. Some reductions may be implemented over a three year period depending on severity of the reduction.

3) If protests are received, the authorized officer will review the decision in light of the comments received and then will issue the final decison. The final decision will allow 30 days in which the operator can appeal the decision. If an appeal is received it will be handled in accordance with current regulations (40 CFR 4.470).

c. Allotment Management Plans

Allotment Management Plans (AMPs) would be developed following the decision process on a priority basis within each resource area (Appendix XIII). AMPs would be formulated based upon analysis of data contained in the final CDCA Plan, casefiles, and public contact. The management objectives of the final CDCA Plan would be used in conjunction with specific resource objectives to identify the objectives of the AMPs. All AMPs would be written within 5 years after completion of the Plan. All AMPs would be implemented on a priority basis within 5 years after their development, assuming adequate funding (Table LG-1).

d. Monitoring

The monitoring studies used would be standard BLM studies, to the extent possible. When BLM studies are not appropriate, a thorough description of the study technique would be maintained in the allotment file. The allotment file would also contain a schedule for reading each study which is contained within the allotment. Comparison of data between AMPs would be used when similar conditions exist.

Key areas to be monitored would be specified in the AMP. Based upon the results of monitoring studies, livestock grazing use may be adjusted upward or downward and/or the grazing management system modified to meet the objectives of the AMP.

If data becomes available, which demonstrates the ephemeral turnout requirements of 200 or 350 pounds are not meeting the objectives of this Plan, then upward or downward adjustments will be made.

A summary of monitoring studies are as follows:

1) Large scale aerial photo transects (1:1000): evolution of composition, cover, general trend and composition.

2) Trend and utilization plots: analysis of trend of vegetation condition, cover, composition and reproduction.

3) Livestock grazing exclosures: vegetation comparison areas.

4) Actual Use Data (use supervision): recorded actual livestock use.

5) Field transects: vegetation cover and composition.

6) Rain gauge: precipitation measurements.

7) Production plots for annuals: determination of yearly annual plant production.

For further details regarding monitoring refer to Appendix XIII.

e. Consultation Process

Consultation with Federal, State, and local government agencies and organizations; private organizations; and individuals (with primary emphasis on leasees, permittees, landowners, and advisory boards) would be continued through the implementation and monitoring phase of this Plan.

Special attention to this process would be made during the decision process, development of the Rangeland Management Program Document (RMPD), AMP implementation, and development of monitoring systems (see Appendix XIII, Consultation Process).

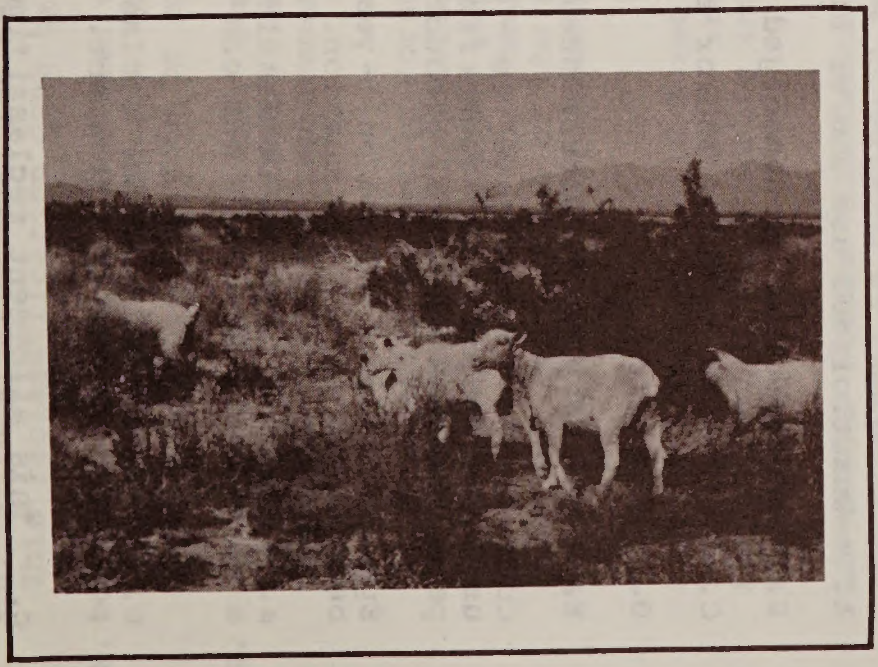
f. Limitations During Interim Management

In general, livestock grazing, at appropriate stocking levels, is compatible with maintaining wilderness suitability. Many areas in the CDCA, having a long history of livestock use, were classified as WSAs during the wilderness inventory, indicating that such areas still retained their wilderness qualities.

In essence, use and maintenance of range improvements or new range improvements may be installed and maintained so long as the activities and structures do not impair the area's wilderness suitability. This would be determined during the environmental analysis process prior to project work.

Also, grazing uses that are new, or different from those existing on October 21, 1976, must meet the test of not impairing wilderness suitability. (Refer to "Interim Management Policy and Guidelines for Lands Under Wilderness Review, December 12, 1979," excerpts of which are printed on the back of Map No. 1 in the back cover pocket of this document).

Proposed allotments may not become established as allotments prior to Congressional designation of wilderness in the CDCA. (See discussion under New Proposed Allotments, in this element).



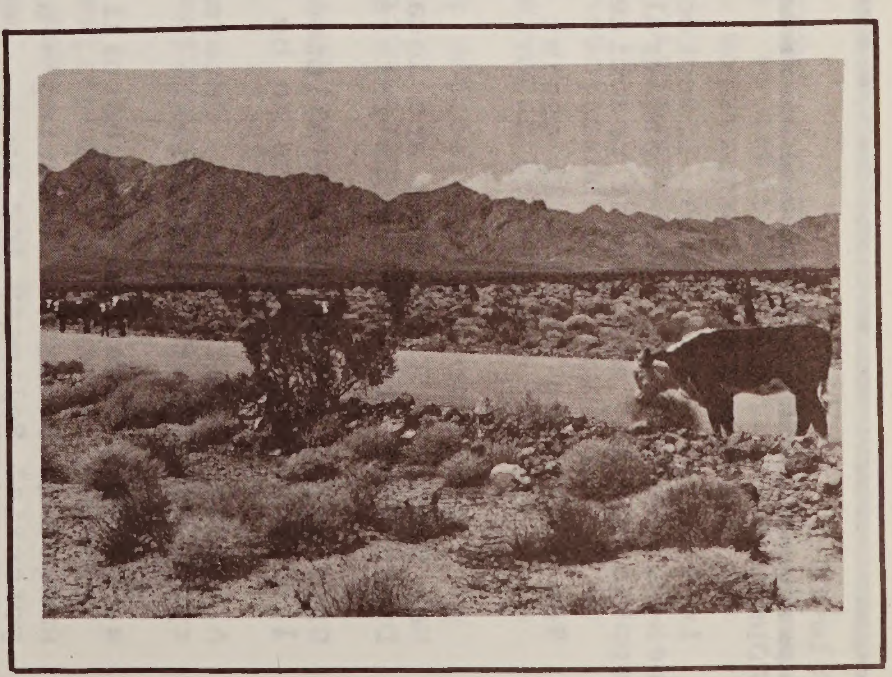


Table LG-1 Proposed Livestock Grazing Management

HEADNOTES

In the following table, livestock grazing allotments are grouped into these range types: 1) Existing Perennial, Ephemeral/Perennial, and Ephemeral; and 2) Proposed Ephemeral/Perennial and Perennial. For each of these range types, proposed grazing management practices are provided.

The following notes will assist in the interpretation of information presented in the table.

A. Map Number - Allotments are located and identified on element map by this number. This number is also identical to Draft Plan for easy cross reference.

B. Grazing Allotment Name - Allotments grouped into the range type prevalent on that allotment. This grouping allows like management practices to be easily described. See definition of range types in element.

C. Allotment Public Acrage - Determined by comparison of case file records, Landsat Imagery digitized, and/or USGS typographic map examination.

a. Administrative responsibilities of livestock grazing on Naval Weapons Center included.

D. Rangeland Condition - Rating - Ranking based on plant cover and species composition relative to the presumed potential "climax" for area. See element discussion.

Factor - These affect condition by changing plant composition, reducing cover, and/or reducing vigor. These factors are:

A. = Unauthorized use and/or high historical use.

B. = Uncontrolled or unmanaged burro and/or wildhorse populations.

C. = Off-road vehicles and/or recreationist.

D. = Minerals.

E. = Military Land Disturbance.

E. Current Use - Preference Use - In essence these are the existing livestock allocations. This was the base level of use that could be authorized yearly to the livestock operator. Existing preference could have included both perennial and ephemeral production. (Refer to discussion in Element.)

Ephemeral Use - (Based on 5-year average.) Ephemeral authorizations for existing use are shown by 5-year average because of yearly fluctuation.

a. These allotments reclassified ephemeral/perennial from perennial for better management. Preference use has had a ephemeral component, but can't be distinguished from perennial in method of allocation. See Appendix XIII.

b. These allotments reclassified ephemeral/perennial from ephemeral because of a significant percentage of perennial forage in allotment. No existing preference allocation. See Appendix XIII.

c. This allotment reclassified from ephemeral/perennial to ephemeral because predominant ephemeral forage. See Appendix XIII.

d. This allotment reclassified from ephemeral/perennial to ephemeral to reduce impacts on wildlife resources. This reclassification done by management decision.! See Appendix XIII.

F. Carrying Capacity - Has been determined by consideration of all surveys conducted on allotment, including June 1980 remote sensing (Landsat) and large scale photo transect information. Carrying capacity based on public lands, no consideration on private or exchange of use. See Element text and Appendix XIII.

G. Proposed Plan - Adjustment for Condition Class Improvement - Perennial and Ephemeral/Perennial allotments have a portion of the carrying capacity not allocated for consumption to allow an improvement of condition class. Ephemeral condition improvement considerations made in allotment management plan. See Element text and Appendix XIII. IX Part 2.

Big Horn Sheep Renewable Forage Allocation/Deer Renewable Forage Allocation - Estimated population needs of deer and double the estimated populations of the big horn sheep have been considered. Both of these allocations of livestock forage carrying capacity represents only the forage where livestock and wildlife compete for the same species, in the same locations. The remainder of wildlife forage needs are available from plant species not utilized by livestock and regions of the allotment unaccessable to livestock grazing. No allocation made on proposed allotments because boundary adjustments have been made to eliminate any conflicts. See Element text and Appendix XIII.

Burro Allocation - Wild Horse Allocation - Allocation of livestock forage to burros and wild horses made on public land where their range includes all or portions of grazing allotments. Entire forage needs of burros and wild horses derived from public lands, with no allocation from private lands they may range on. See Element text and Appendix XIII.

Livestock Forage Allocation - After allocation to previous needs have been satisfied from total carrying capacity, the remainder is considered for livestock. Where the remainder is greater than current preference use, then present use is maintained until monitoring shows low utilization and a demand for more AUMs. If the remainder is lower than current preference, then allotment preference will be reduced until monitoring demonstrates more AUMs available. See Element text and Appendix XIII.

H. Special AMP Provisions - These provisions have been designed to eliminate livestock conflicts with wildlife. Proposed allotment boundaries have been adjusted to alleviate conflicts with wildlife. See Element text and Appendix XIII.

a. Special wildlife objectives:

A-1 Specific bighorn sheep objectives.

A-2 Specific desert tortoise objectives for highly crucial habitat.

A-3 Specific desert tortoise objectives for crucial habitat.

b. Riparian area protection improvements.

c. Special monitoring requirments (e.g., exclosures, utilization checks, etc.).

d. ACEC protection practices.

e. Season of use consideration.

I. AMP Implementation Priorities - Were based on other resource values, range condition, percentage of public land, and opportunities for mitigation of adverse impacts to livestock operation. Consideration to the number of allotments in resource area and comparison between allotments in the same resource area. See Element text and Appendix XIII for more details.

High - Prepare and implement activity plan as soon as possible.

Medium - Prepare and implement activity plan as soon as all high priority allotments are completed.

Low - Prepare and implement activity plan as soon as all medium priority allctments are completed.

a. Gold Valley Allotment already has an allotment management plan. Monitoring has demonstrated an increase of AUMs is available because of low utilization.

b. These Allotments are portions of Nevada Allotments already managed under an allotment management plan by that State.

c. Coordination wil Las Vegas, Nevada Office needed during preparation of AMP.

d. Possible rare and endangered plant species located in allotment.

a Table LG-1 (Continued)

Proposed Livestock Grazing Management

Map[A] No.	Grazing Allotment[B] Name	BLM File Number	Public Acreage[C]	Rangeland[D] Condition		Class of Livestock	Existing Use[E]			Proposed Plan[G]							
							Preference	Ephemeral (5 Year Avg.)	Carrying Capacity[F]	Adjustments For Condition Class Improvement	Bighorn Sheep Renewable Forage Allocation	Deer Renewable Forage Allocation	Burro Renewable Forage Allocation	Wild Horse Renewable Forage Allocation	Livestock Renewable Forage Allocation	Special AMP Provisions[H] (See Headnotes)	AMP Implementation Priorities[I]
			AC.	RATING	FACTORS		AUMs	AUMs	AUMs	AUMs	AUMs	AUMs	AUMs	AUMs	AUMs		
	PERENNIAL																
1.	Fishlake Valley	6003	1,482	Good		Sheep/ Cattle	52		96						52		Low[c]
2.	Bar 99	6001	13,150	Good	B	Sheep/ Cattle	307		1,147				27		307		Low[c]
3.	Deep Springs	6005	44,062	Fair	A,B	Sheep/ Cattle	1,250		1,410	353		13		26	1,018	A,D	Med
4.	Last Chance	6004	101,324	Fair	A,B	Sheep/ Cattle	3,267		4,338	1,085	13	5	164	16	3,055	A-1,B	High[c]
5.	Oasis Ranch	6000	22,515	Good	B	Sheep/ Cattle	656		1,297				39	14	656	B	Low[c]
6.	South Oasis	6006	15,499	Fair	B	Sheep/ Cattle	477		1,062	266			223	65	477		Med
7.	Darwin	5010	7,323	Fair	B	Horses	44		659	165			168		44		Low
8.	Hunter Mtn.	5013	59,580	Fair	B	Cattle	1,105		4,274	1,069	10	53	40		1,105	A-1	High
9.	Lacey-Cactus-McCloud	5012	421,172[a]	Fair	B,E	Cattle	4,873		22,444	5,611	6	168	4,949	2,021	4,873	A-1,B	High
10.	Olancha Common	5011	11,934	Good		Cattle	606		1,009			300			606	E	Med
11.	Tunawee Common	5009	46,883[a]	Fair	B	Sheep/ Cattle	1,954		2,335	583			212		1,540	A	Med
16.	Oak Creek	5015	160	Fair		Cattle	16		20	4					16		Low
18.	Warren	5002	584	Good	A,C	Sheep	55		55						55		Low
	Perennial Total		745,668				14,662		40,146	9,136	29	539	5,822	2,142	13,804		

b Table LG-1 (Continued)

Proposed Livestock Grazing Management

			Public Acreage^C	Rangeland^D Condition		Class of Livestock	Existing Use^E			Proposed Plan^G							
							Preference	Ephemeral (5 Year Avg.)	Carrying Capacity^F	Adjustments for Condition Class Improvement	Bighorn Sheep Renewable Forage Allocation	Deer Renewable Forage Allocation	Burro Renewable Forage Allocation	Wild Horse Renewable Forage Allocation	Livestock Renewable Forage Allocation	Special AMP Provisions^H (See Headnotes)	AMP Implementation Priorities^I
Map^A No.	Grazing Allotment^B Name	BLM File Number	AC.	RATING	FACTORS		AUMs	AUMs	AUMs	AUMs	AUMs	AUMs	AUMs	AUMs	AUMs		
	EPHEMERAL/PERENNIAL																
17.	Rudnick Common	5008	153,093	Fair	A,C	Sheep/ Cattle	26,210	^{a}	8,291	2,073					6,218	C	High
19.	Walker Pass Common	0077	87,957	Fair	A,C	Cattle	7,242	^{a}	4,519	1,130		21			3,368	B,C	High
20.	Pahrump	5000	12,286	Fair		Cattle	550	^{a}	471	118					353	A-1	Low^c
21.	Hansen Common	5006	40,131	Good	A	Sheep/ Cattle	354	698	1,196			54			354		Med
27.	Harper Dry Lake	7,119	12,816	Good	C	Cattle	0	740^b	406						406	A-3,B,C	Med
34.	Valley Well	7117	640	Fair		Cattle	24	0	31	7					24	A-3	Low
35.	Newberry/Ord	7110	25,503	Fair	A,C,D	Cattle	0	1,062^b	1,031	258					773	C	High
36.	Rattlesnake Cyn.	7111	24,328	Good	C,D	Cattle	1,044	0	1,044						1,044		Med
37.	Whitewater Cyn.	7118	26,878	Good	B,C	Cattle	768	0	1,392			148	38		768		Med
39.	Clark Mountain	7203	88,312	Fair	B	Cattle	1,872	0	2,633	658	20	40			1,872	A-1,2,B,E	High^c
40.	Colton Hills	7202	147,827	Good	B	Cattle	2,880	480	3,986		35	72			2,880	A-1,2,3,B,E	High
41.	Crescent Park	7213	31,780	Good		Cattle	1,560	0	1,704		15	14			1,560	A-1,2,B,E	High^b
43.	Granite Mountain	7211	276,125	Good	B,C	Cattle	4,716	1,845	4,145		104	38			4,003	A-1,B,E	Med
44.	Gold Valley	7212	16,190	Good	B	Cattle	1,200	0	1,314		10	35			1,269	A-1,B,E	Low^a
45.	Horsethief Springs	7207	137,418	Fair		Cattle	2,424	0	5,626	1,407	9	19			2,424	A-1,B,E	Med
46.	Kessler Springs	7208	252,172	Good	A,B	Cattle	8,016	1,700	10,334		6	163	462		8,016	A-1,2,B,E	High
47.	Lanfair Valley	7210	339,553	Good	A,B,C	Cattle	12,168	2,300	15,853		107	67		72	12,168	A-1,2,B,E	High
49.	Round Valley	7216	653	Poor	A	Cattle	27	0	62	31					27	A-1,B,E	Low
50.	Valley View	7200	281,802	Good	B	Cattle	8,485	1,500	9,418		12	10	630		8,485	A-1,2,B,E	High
51.	Valley Wells	7209	237.258	Fair	B	Cattle	4,848	900	6,681	1,670			371		4,640	A-1,B,E	Med
53.	Jean Lake	7217	9,609	Good		Cattle	312	0	251						251	A-2	Med
	Eph/Per Total		2,202,331				84,700	11,225	80,388	7,352	318	681	1,501	72	60,903		

C Table LG-1 (Continued)

Proposed Livestock Grazing Management

Map[A] No.	Grazing Allotment[B] Name	BLM File Number	Public Acreage[C]	Rangeland Condition[D]		Class of Livestock	Existing Use[E]			Proposed Plan[G]							
			AC.	RATING	FACTORS		Preference AUMs	Ephemeral (5 Year Avg.) AUMs	Carrying Capacity[F] AUMs	Adjustments For Condition Class Improvement AUMs	Bighorn Sheep Renewable Forage Allocation AUMs	Deer Renewable Forage Allocation AUMs	Burro Renewable Forage Allocation AUMs	Wild Horse Renewable Forage Allocation AUMs	Livestock Renewable Forage Allocation AUMs	Special AMP Provisions[H] (See Headnotes)	AMP Implementation Priorities[I]
	EPHEMERAL																
12.	Antelope Valley	5004	6,500	Fair	A,C	Sheep		529									Low
13.	Bissel	5001	4,002	Fair	A,C	Sheep		308								A-3	Low
14.	Cantil Common	5005	305,000	Fair	A,C	Sheep		8,435								A-2,3	High
15.	Monolith Cantil	5007	23,043	Good	A,C	Sheep		200								A-2,3	High
22.	Boron Sheep	7102	4,714	Good	A	Sheep		157								A-3	Med
23.	Buckhorn Cyn.	7103	16,791	Fair	A	Sheep		702								A-3	Med
24.	Goldstone	7104	9,006	Good	D	Sheep		572									Low
26.	Gravel Hills	7107	65,598	Good		Sheep		2,698								A-2,3	High
28.	Lava Mtns.	7108	16,830	Good		Sheep		568								A-2	High
29.	Pilot Knob	7106	97,920[a]	Good	B,E	Cattle		3,584								A-3	Med
30.	Shadow Mtns.	7113	36,583	Fair	A,C	Sheep		2,557									Low
31.	Spangler Hills	7112	66,899	Good	C	Sheep		999								A-3	Med
32.	Stoddard Mtn.	7114	170,126	Good	A,C	Sheep		1,645								A-2,3	High
33.	Superior Valley	7116	167,648	Good	C,D	Sheep		2,247									Med
38.	Afton Canyon	7215	41,825	Fair	C	Cattle		359									Low
42.	Cronese Lake	7219	51,000	Good		Cattle		1,019								A-3	Med
48.	Piute Valley	7204	33,468	Good		Horses/ Cattle		180									High
52.	Ford Dry Lake	7044	19,089	Good		Sheep		2,720									
54.	Lazy Daisy	7220	451,617	Good	B,C	Cattle		3,192[d]								A-1,2,3	High
55.	Sheep Driveway	5098	23,040	Fair	A,C	Sheep		1,353									
	Ephemeral Total		1,297,322					34,024									
Total of all Existing Allotments			4,245,321				99,362	45,249	120,534	16,488	347	1,220	7,323	2,214	74,707		

d Table LG-1 (Continued)

Proposed Livestock Grazing Management

Map^{A} No.	Grazing Allotment^{B} Name	Public Acreage^{C}	Rangeland Condition^{D}			Carrying Capacity^{F}	Proposed Plan^{G}			
							Burro Renewable Forage Allocation	Wild Horse Renewable Forage Allocation	Livestock Renewable Forage Allocation	AMP Implementation Priorities^{I}
		AC.	RATING	FACTORS		AUMs	AUMs	AUMs	AUMs	
	PROPOSED ALLOTMENTS									
	Ephemeral/Perennial									
57.	Rattlesnake Annex	7,454	Good	C,D	Sheep/ Cattle	592			592	
60.	Round Mtn.	14,000	Good	D	Cattle	1,048			1,048	
66.	Death Valley Jct.	18,150	Good	B	Cattle	1,370	17	59	1,294	c d
69.	Ord Mtn. Extension	41,100	Good	B	Cattle	1,572			1,572	
71.	Whitewater Cyn. Extn.	3,600	Good	B	Cattle	142			142	
80.	Pahrump Extension	41,535	Good		Cattle	1,569			1,569	
Proposed Eph/Per Total		125,839				6,293	17	59	6,217	
	Ephemeral									
58.	Johnson Valley	115,000	Fair	A,C	Sheep					
59.	Ludlow	43,300	Good	A	Sheep					
62.	Rice Valley	37,800	Good	C	Sheep					
63.	Palen	50,500	Good	C,D	Sheep					
64.	Ford Dry Lake Annex	47,200	Good	A	Sheep					
65.	Homewood Cyn.	12,900	Fair	B	Sheep					
73.	Eureka Valley	3,500	Good	B	Cattle					
74.	Last Chance Ext.	8,000	Good	A,B	Sheep/ Cattle					
75.	Superior Valley Ext.	35,000	Good	C,D	Sheep					
Proposed Ephemeral Total		353,200								
Total of all Proposed Allotments		479,039				6,293				

Table LG-2

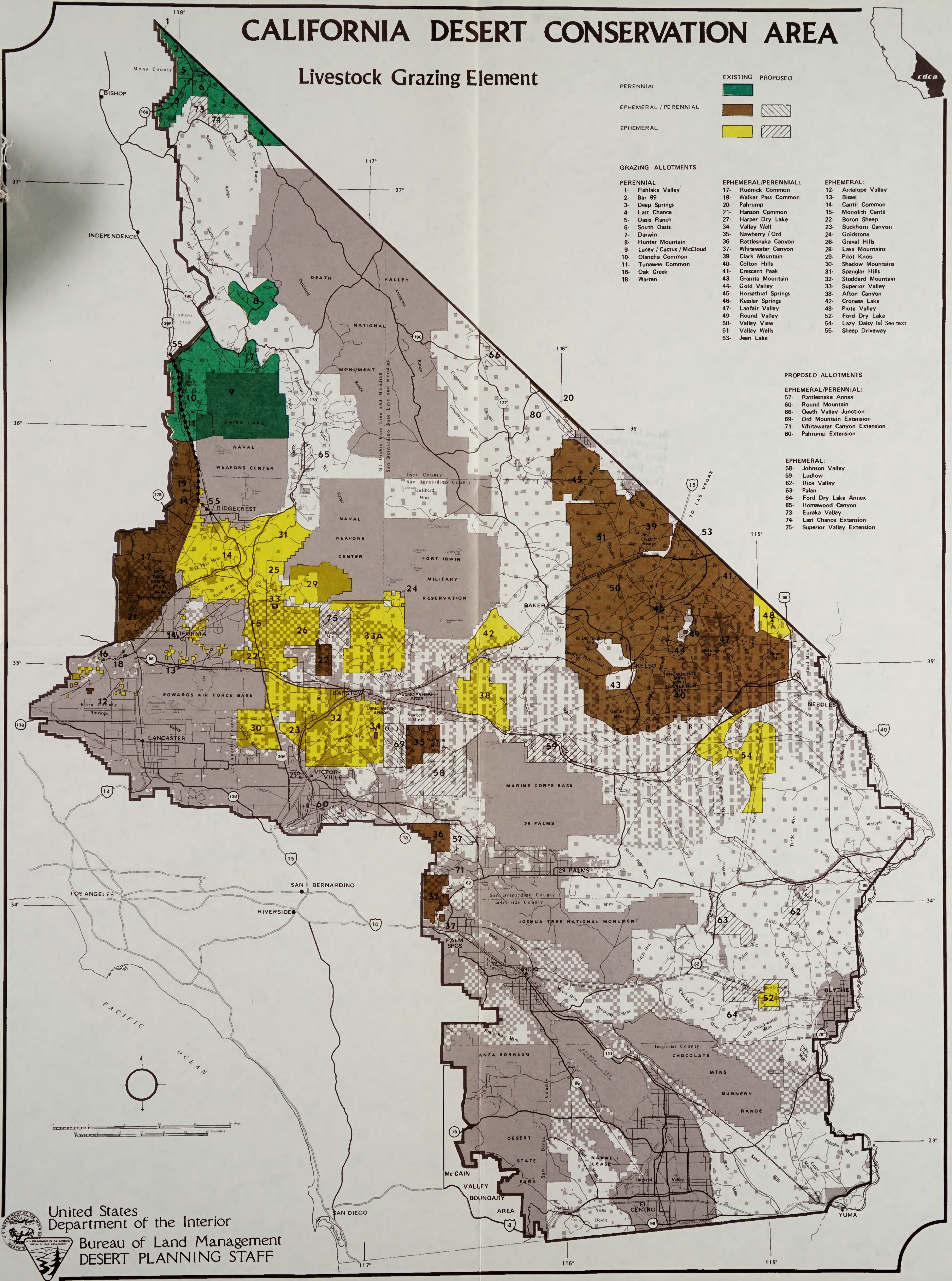
Summary of the Proposed Alternative on Livestock Grazing

EXISTING GRAZING ALLOTMENTS	Acres in Grazing Allotments	Current Use Based on 5 Yr Ave AUMs	Perennial Carrying Capacity AUM	Adjustments Made to Improve Condition Rating AUM	Forage Allocation to Wildlife AUM	Forage Allocation to Wild Horses Burros AUM	Forage Allocation to Livestock Forage AUM	Non-Allocated AUMs from Carrying Capacity (a)
Perennial Allotments	745,668	14,662 per	40,146	9,136	568	7,964	13,804	8,674
Ephemeral/Perennial Allotments	2,202,331	84,700 per 11,225 Eph	80,388	7,352	999	1,573	60,903	9,561
Ephemeral Allotments	1,297,322	34,024						
TOTALS FOR EXISTING GRAZING ALLOTMENTS	4,245,321	99,362 per 45,249 Eph	120,534	16,488	1,567	9,537	74,707	18,386
PROPOSED GRAZING ALLOTMENTS								
Ephemeral/Perennial Proposed Allotments	125,839		6,293			76	6,217	
Ephemeral Proposed Allotments	353,200							
TOTALS FOR PROPOSED ALLOTMENTS	479,039		6,293			76	6,217	

(a) See discussion under allocations in Livestock Grazing Element.

CALIFORNIA DESERT CONSERVATION AREA

Livestock Grazing Element



	EXISTING	PROPOSED
PERENNIAL	🟩	
EPHEMERAL / PERENNIAL	🟫	▧
EPHEMERAL	🟨	▨

GRAZING ALLOTMENTS

PERENNIAL:
1- Fishlake Valley
2- Bar 99
3- Deep Springs
4- Last Chance
5- Oasis Ranch
6- South Oasis
7- Darwin
8- Hunter Mountain
9- Lacey / Cactus / McCloud
10- Olancha Common
11- Tunawee Common
16- Oak Creek
18- Warren

EPHEMERAL/PERENNIAL:
17- Rudnick Common
19- Walker Pass Common
20- Pahrump
21- Hanson Common
27- Harper Dry Lake
34- Valley Wall
35- Newberry / Ord
36- Rattlesnake Canyon
37- Whitewater Canyon
39- Clark Mountain
40- Colton Hills
41- Crescent Peak
43- Granite Mountain
44- Gold Valley
45- Horsethief Springs
46- Kessler Springs
47- Lanfair Valley
49- Round Valley
50- Valley View
51- Valley Walls
53- Jean Lake

EPHEMERAL:
12- Antelope Valley
13- Bissel
14- Cantil Common
15- Monolith Cantil
22- Boron Sheep
23- Buckhorn Canyon
24- Goldstone
26- Gravel Hills
28- Lava Mountains
29- Pilot Knob
30- Shadow Mountains
31- Spangler Hills
32- Stoddard Mountain
33- Superior Valley
38- Afton Canyon
42- Cronese Lake
48- Piute Valley
52- Ford Dry Lake
54- Lazy Daisy (a) See text
55- Sheep Driveway

PROPOSED ALLOTMENTS

EPHEMERAL/PERENNIAL:
57- Rattlesnake Annex
60- Round Mountain
66- Death Valley Junction
69- Ord Mountain Extension
71- Whitewater Canyon Extension
80- Pahrump Extension

EPHEMERAL:
58- Johnson Valley
59- Ludlow
62- Rice Valley
63- Palen
64- Ford Dry Lake Annex
65- Homewood Canyon
73- Eureka Valley
74- Last Chance Extension
75- Superior Valley Extension

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34°
33°
Mono County
BISHOP
INDEPENDENCE
DEATH VALLEY NATIONAL MONUMENT
CHINA LAKE NAVAL WEAPONS CENTER
RIDGECREST
NAVAL WEAPONS CENTER
FORT IRWIN MILITARY RESERVATION
BAKER
KELSO
TO LAS VEGAS
NEEDLES
EDWARDS AIR FORCE BASE
LANCASTER
BARSTOW
USMC NEBO AREA
USMC YERMO AREA
VICTORVILLE
MARINE CORPS BASE 29 PALMS
29 PALMS
SAN BERNARDINO
LOS ANGELES
RIVERSIDE
PALM SPGS
JOSHUA TREE NATIONAL MONUMENT
INDIO
BLYTHE
ANZA BORREGO DESERT STATE PARK
CHOCOLATE MTNS GUNNERY RANGE
NAVAL LEASE
McCAIN VALLEY BOUNDARY AREA
SAN DIEGO
EL CENTRO
YUMA
PACIFIC OCEAN
Inyo County
San Bernardino County
Riverside County
Imperial County
Kern County
Miles
Kilometers

United States
Department of the Interior
Bureau of Land Management
DESERT PLANNING STAFF

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H. Recreation Element

FINDING

The California desert attracts millions of visitors annually to its wide spectrum of recreational opportunities. Its diverse landscapes create a variety of physical and psychological settings which provide a "desert experience" of natural beauty, solitude, and freedom from the structure and regulations of the urban areas of southern California, where 85 percent of these visitors live.

Conflicts have arisen between recreationists using vehicles as a means of access and those who operate vehicles as a recreational activity. In addition, recreationists compete for space with other resource uses such as mining and energy transmission. While strongly advocating that recreational facilities and regulations remain minimal, desert recreationists increasingly demand the protection of the natural and cultural values which are essential to most desert recreation. Scenic values are often cited by the public as the desert's most important resource.

The California desert will become increasingly important as a resevoir of open space and place for outdoor recreation. Lands managed by BLM, the least known and understood public lands, will become especially significant to recreationists.

A substantial increase in demand for facilities and services, especially educational and interpretive programs, will occur primarily because of increased population growth in southern California. Other factors include:

1) an emerging awareness of desert resources and values,
2) saturation of other outdoor recreation areas in southern California,
3) energy shortages and economic stresses which will cause more people to come to the relatively close desert and stay longer, and
4) technological innovation in recreation equipment which will influence user trends and consequently the demand for various resources.

ELEMENT OUTLINE

1. GOALS
2. ACTIONS PROPOSED
   a. The Recreational Opportunity Spectrum
      1) Open Space Areas
      2) Hunting and Collecting
      3) Nature Study / Resource Oriented Recreation
      4) Education / Research
      5) Wilderness Opportunities
      6) Vehicle Play
      7) Competitive Vehicle Events
   b. Access
   c. Visual Resource Management Program
   d. Visitor Services Program
      1) Visitor Information
      2) Visitor Protection and Assistance
   e. Visitor Facilities
3. IMPLEMENTATION
   a. Priority Tasks
   b. Monitoring
   c. Limitations During Interim Management

1. GOALS

The goals of the Recreation Element are to:

a. Provide a wide range of opportunities within resource capabilities for engaging in recreational activities for all Desert users, particularly those seeking release from adjacent urban environments.

b. Provide recreational management and facilities consistent with sound visitor and resource protection practices, with emphasis on conserving desert resources that have special, scenic, historic, scientific, or recreation values.

c. Protect Desert land users and minimize conflicts among recreationists and between recreationists and other users of desert resources.

d. Enhance the enjoyment of the recreation experience, promote resource opportunities, and aid resource protection by increasing understanding of the California Desert's resources uses through public involvement in volunteer efforts, interpretation and environmental education programs, community outreach efforts, and other recreational resource programs.

e. Monitor and evaluate visitor-use preferences and adjust Bureau programs to meet these changing needs.

f. Provide for off-road vehicle use where appropriate in conformance with FLPMA, Section 601, and Executive Orders 11644 and 11989.

2. ACTIONS PROPOSED

a. The Recreational Opportunity Spectrum

The Desert provides the resources necessary for a variety of recreational experiences. The Bureau is committed to providing opportunities for the visitor to attain various types of outdoor recreational benefits dependent upon a combination of (1) the kind of activity desired, (2) the physical or locational setting, and (3) the level of experiences (psychological and/or physiological). The planning tool used to consider these opportunities is called the Recreational Opportunity Spectrum and is outlined in Appendix V.

As addressed here, various recreational opportunities are considered in groups along a continuum of opportunities ranging from intensive motorized vehicle-oriented activities at one end to resource-oriented activities at the other. These activity groupings have been developed primarily for planning purposes and may address either specific types of activities or general recreational concerns. The following discussion may be supplemented by Map No. 14, "Recreational Opportunities", located at the end of this element.

1) OPEN SPACE AREAS

The Desert provides outstanding opportunities for activities such as soaring, target shooting, hang gliding, model rocket and airplane flying, and sand sailing. Open space, particularly that available on dry lake beds, is a basic requirement for these activities.

Superior and Ivanpah dry lake beds have been specifically designated for non-motorized open space recreational activities. (See also Table MV-1 in the Motorized Vehicle Element)

2) RECREATION ACTIVITIES

The California Desert's diversity of natural values provides a myriad of things for people to do in pursuing their recreational interests.

There is a wealth of geological areas to lure the rockhound and the hobby prospector. Hunters find the Desert a challenge for game species from chukkar partridge to mule deer.

Sightseers, painters and photographers have long known the recreational delights of spectacular spring wildflower displays and year-round bird watching, as well as just plain old "poking around" and soaking up the desert atmosphere.

Regardless of the methods available to partake of the Desert's recreation menu, the provisions to ensure that these opportunities will continue to exist must be a constant paramount factor with both management and the recreationist.

3) NATURE STUDY AND RESOURCE ORIENTED RECREATION

The emphasis of this opportunity is on the natural environment, as there appears to be a close correlation between environmental quality and the quality of the recreational experience. Many activities, such as sightseeing, camping, and hiking, depend on an unspoiled natural setting for a rewarding experience. Areas will be managed according to their specific multiple-use class to provide for a wide range of natural resource recreational opportunities.

Currently construction has been completed on 70 miles of the 160 miles of the Pacific Crest National Scenic Trail which traverses BLM-managed lands. Survey and construction activities are continuing on the remaining sections. A management plan for the entire BLM portion of the trail will be completed in September.

BLM is also proposing the 139-mile Old Mojave road as a National Trail. Portions of the trail, which extends from the Colorado River to Camp Cady, are open to motorized vehicle travel. The proposal is presently in the second phase of study by the Heritage Conservation and Recreation Service.

In response to public comment urging the inclusion of a Desert Trail in the National Trails System, the Bureau will reconsider the Desert Trail concept and work towards its implementation if its feasibility appears positive.

Recreation Activity Management Plans will consider connector trails from urban centers to trail systems in the CDCA.

4) EDUCATION AND RESEARCH

Scientific research and education, while not recreation in a strict sense, accounts for a quarter of a million visitor-use days annually.

Many college, university, and precollege classes visit the Desert for educational purposes. Sites receiving the highest use are identified on the recreational opportunities map. A number of sites have been set aside for in-depth study of Desert ecology and the effect of human use on Desert resources. Still other research areas are devoted to studying rare or endangered plants and wildlife species. Many of the studies and research findings are incorporated into the Bureau's evaluation of its management programs and environmental studies and assessments.

5) WILDERNESS OPPORTUNITIES

Opportunities for solitude and respite from urban amenities are provided in abundance in the Desert. The Bureau has assured the public of an opportunity for quality wilderness experiences by proposing a system of wilderness areas which will protect many features unique to Desert wilderness. (see Wilderness Element for specific information). Wilderness Management Plans will be developed for all wilderness areas upon designation.

6) VEHICLE PLAY

Vehicle play open areas are designated for enjoyment and challenge of the vehicle operator because they possess a variety of terrain types, surface textures and grade variations. Vehicle play open areas were selected based on the following considerations and criteria:

a) Traditional intense motor vehicle use has been recorded in the area.

b) Boundary of area is easily recognizable in order to manage the activity.

c) Acceptable soil sensitivity exists.

d) Sensitive and significant plants and wildlife can be avoided or impacts to them mitigated.

e) Cultural and Native American resources can be avoided or impacts to them mitigated.

f) Land use patterns, access and private land ownership conflicts have been considered.

Recreation Activity Management Plans will be developed for each vehicle play open area.

BLM planners are also currently working with the State of California Parks and Recreation Department personnel to provide a variety of motorized vehicle use opportunities and facilities through the State Off-Highway Vehicle Grant Fund. The primary thrust of this program is to make available to the public areas suitable for motorized vehicle recreation. Use of the State OHV funds in the CDCA will be consistent with the objectives of this element and of the multiple-use guidelines of the Proposed Plan.

7) COMPETITIVE VEHICLE EVENTS

Organized competitive events will be allowed in Multiple-Use Classes M and I areas and may be permitted to cross some Multiple-Use Class L areas on "approved vehicle routes of travel" (see Motorized Vehicle Access Element). All competitive events will require permits, environmental assessment and appropriate resource, safety and management stipulations.

This will allow for an appropriate number of events by carefully controlling, but not foreclosing, access across sensitive areas. This provision allows the Bureau options for applying deferred use techniques on these routes in order to mitigate impacts. Criteria for race events are contained in the multiple-use class guidelines. Because of the potentially sensitive nature of resources in Multiple-Use Class L areas, race routes through these areas must comply with the following additional requirements:

a) All courses will remain on routes of travel that have been "approved" for motorized vehicle use in Class L.

b) Pit spectator areas will not be allowed. (Check points will be allowed for crews only.)

c) Fragile and/or significant area will be avoided.

d) BLM will require the event sponsors to mitigate potential negative impacts and rehabilitate impacted areas.

e) All race courses are temporary and may not be used on a consistent basis pending specific resource studies. (See Appendix V for further clarification.)

f) Long term adverse impacts will not be allowed.

g) Event participants may have to traverse Class L under controlled (yellow flag) conditions (e.g., no passing, timed speeds, maintained roads) as appropriate for resource protection and public safety.

h) Length (mileage) of event passing through Class L will be a key factor in determining use.

i) Width of course will be the minimum practicable for resource protection and public safety.

j) All other alternatives have been considered in selection of the approved routes for the event.

All criteria are in addition to those required by 43 CFR 8372 and BLM Manual 6260.

Prior to completion of the route approval process for Class L, any course proposed across Class L must be on an "existing route of travel" as described in the Motor Vehicle Access Element and meet the criteria for approval.

b. Access

To engage in most Desert recreational activities outside of open areas, visitors must travel on motorized vehicle routes. Understandably, vehicle access is among the most important recreation issues in the Desert. A primary consideration of the recreation program, therefore, is to ensure that access routes necessary for recreation enjoyment are provided. Specific route identification, as outlined in the Motorized Vehicle Access Element, will be initiated immediately upon adoption of this Plan and with full participation of Desert recreationists, landowners, and other users of Desert resources.

c. Visual Resources Management Program

The CDCA has a superb variety of scenic values, or visual resources. The public considers these scenic values a significant resource. The Bureau recognizes these values as a definable resource and an important recreation experience. These visual resources will receive consideration in Bureau of Land Management resource management decisions.

Since most management activities involve alteration of the natural character of the landscape to some degree, the Bureau will take the following actions in order to effectively manage for these activities:

1) identify the appropriate levels of management, protection, and rehabilitation on all public lands in the CDCA, commensurate with visual resource management objectives in the multiple-use class guidelines; and

2) evaluate proposed activities to determine the extent of change created in any given landscape and to specify appropriate design or mitigation measures using the Bureau's contrast rating process.

The contrast rating process is a tool used to determine the extent of visual impact that proposed resource management activities would create in a landscape. It serves as a guide for reducing visual impacts to acceptable levels as defined by the visual management objectives and multiple-use class guidelines.

d. Visitor Services Program

1) VISITOR INFORMATION

The Bureau recognizes the public's desire to obtain easily high quality information about the CDCA. The public's willingness to participate in BLM management decisions and their implementation is also apparent. Five basic components of visitor information are discussed below:

Environmental Awareness Program

Interpretation and environmental education programs will be employed throughout the Desert. Interpretation is defined as creating an understanding and awareness of the environment in the minds of on-site visitors. Environmental education is a more formal approach designed to meet the needs of schools. These programs will focus upon providing practical and interesting information that will enhance recreational experiences. Where appropriate, BLM visitor service personnel will provide scheduled and informal programs on topics varying from discussion and exploration of natural areas to safe vehicle operation in motorized vehicle free-play areas.

Outreach Program

The Bureau will establish a public affairs information office in the Los Angeles metropolitan area. The feasibility of a cooperative effort with other resource agencies, both State and Federal, is being investigated. The office will provide information about the Desert to the public.

Volunteer Program

Individuals and various citizens groups will be asked to identify specific land management activities in which they would like to participate. Legislation authorizing a volunteer program for BLM is pending in Congress, more details on use of volunteers are included in the Implementation Section of the Plan.

Maps and Brochures

A series of maps and brochures will be developed for the Desert, ranging from general maps and theme brochures to suitable brochures and "road maps" of specific areas.

2) VISITOR PROTECTION AND ASSISTANCE

Through regularly scheduled patrols, BLM Desert Rangers and other visitor service personnel will provide the following services to aid the public in safe and enjoyable Desert recreation.

Information

Visitor service personnel will provide maps, brochures, and other information about the desert to the public.

Vehicle Assistance

Visitor service personnel will assist recreationists having vehicle problems.

Emergency Medical Assistance

Visitor services personnel will respond to visitor medical emergencies and provide immediate assistance. (All visitor service personnel will be trained as Emergency Medical Technicians.)

Search and Rescue

Visitor service personnel will respond to initial search and rescue situations and direct operations until relieved by a Sheriff. (Under California law, County Sheriffs have the responsibility for Search and Rescue operations.) Further assistance will be provided at the request of the Sheriff.

Enforcement

Visitor service personnel will be responsible for obtaining compliance with Federal laws. In doing so, they will obtain assistance as necessary from other personnel or local law enforcement officers. BLM Desert Rangers are delegated Federal law enforcement officers.

Posting Signs

Posting signs is necessary in some areas. The Plan establishes various types of resource designations and sign posting will be provided to promote visitor use of the various areas consistent with management objectives. Regulatory signs will be kept to a minimum; most signs will be informational and directional. Standardized letter and symbol signs will notify visitors of recreational and interpretive sites throughout the CDCA.

e. Visitor Facilities

As previously recognized in this Plan, Desert recreationists desire a minimum of facilities and such facilities will be kept to a minimum in the Desert. Due to limiting environmental conditions, visitor safety, resource protection, requirements of certain recreation activities, and the trend toward fewer but longer visits in economy vehicles which are not self-contained, some facility development is necessary.

Campgrounds, trailheads, parking loops, and visitor information kiosks are examples of visitor facilities which may be developed. The location, type, and extent of facility development will be determined in Recreation Activity Management Plans, which will be developed for specific geographic regions of the CDCA using the Plan as a management framework. Detailed resource studies (on-site investigations) will be conducted as an integral part of each specific site development plan to assure compatibility of resource values and facility development. Special attention will be given to avoid impacting riparian areas. Facility development and recreational use will be allowed in these areas only if the quality and quantity of the wetland areas are not impacted. The interests of private landowners will be evaluated to reduce trespass, yet facilitate recreational use of contiguous public lands.

Specific consideration will be given to develop facilities to accommodate the elderly and the handicapped. Consideration will include interpretive facilities and services for all of the senses.

Development of facilities by BLM will be closely coordinated with local, State and other Federal agencies, Indian reservations and private owners. Care will be taken not to duplicate or interfere with other facility suppliers.

3. IMPLEMENTATION

a. Priority Tasks

Upon adoption of this Plan the various guidelines outlined above will become immediately effective. The actions proposed will be implemented primarily through the Recreation Activity Management Plan and Site Plan processes.

A public outdoor recreation interagency coordinating group composed of representatives from local governments within the CDCA, and State and Federal agencies will be formed to ensure communications with all concerned public agencies within the CDCA for efficient and responsive management of the recreation resources.

In conjunction with the interagency group, public input will be encouraged to determine specific actions to be initiated in a given fiscal year. This will assist BLM in developing a priority action plan which will guide visitor management activities.

Site-specific planning and management activity can be expected to occur first within areas containing sensitive and/or unique resources. Wilderness Study Areas and Multiple-Use Class C will receive priority attention as suitability determinations are finalized.

An environmental awareness prospectus for guiding the development of visitor information material and facilities will be prepared by each Resource Area within the CDCA.

b. Monitoring

Monitoring will be conducted to assure that recreational needs are being met. Monitoring for visitor safety, resource protection, and provision of high quality recreational experiences are equally important.

Periodic surveys will be conducted to determine changes in attitudes, preferences, and desires among all user types.

Visitor use flights will continue to determine amount and fluctuations of use. Approximately 7 to 10 flights will be conducted annually.

Additionally, traffic counters will be placed on the ground in high intensity use areas (e.g., campgrounds, open areas) to collect additional data on recreational use.

There will be a continuous effort made to evaluate the progress of the Environmental Awareness Program, monitoring such factors as:

1) The rate and type of requests from the public for services;

2) The amount of public involvement in the decision-making process;

3) Regular assessment of the rate of cumulative environmental impacts related to recreation activities; and

4) The extent to which people voluntarily conform to the various rules and regulations that apply to Desert recreation.

The California desert will become increasingly important as a reservoir of open space and place for outdoor recreation in the coming years. The Proposed Plan seeks to maintain the rich diversity of recreational opportunities which BLM - administered lands offer.

c. Limitations During Interim Management

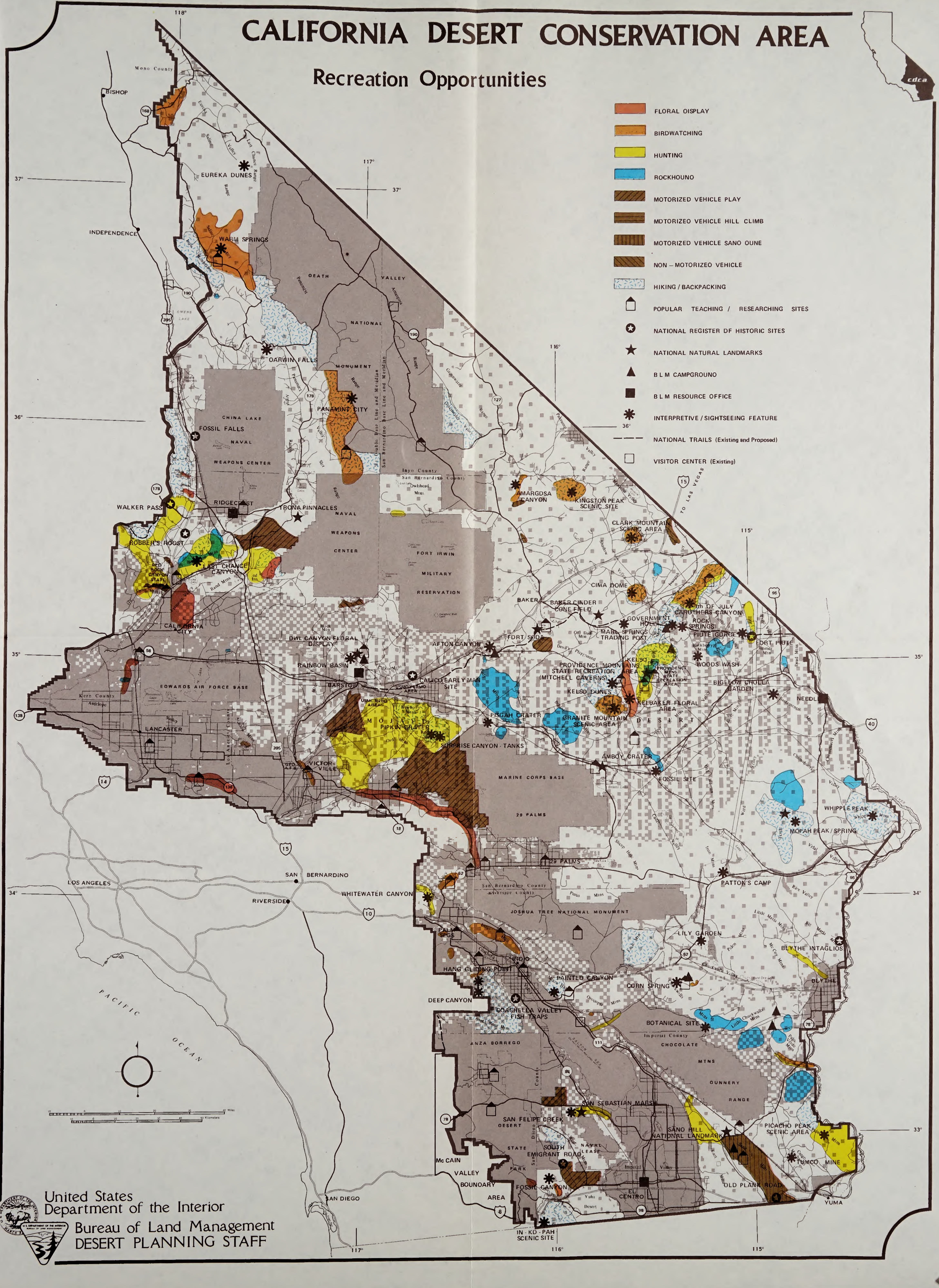
The provision of motor vehicle play areas would be free from Interim Management Policy protecting WSAs, because no WSAs overlap into motor vehicle areas. However, motorized race events could be limited by WSA management.

Developed facilities for recreation are to be added incrementally and for the most part would be temporary, unobtrusive, and primitive in nature, and the WSAs are not expected to conflict with the recreation facility development program.

While the final status of WSAs is being considered by Congress, the visual resources of lands located within Wilderness Study Areas will be managed in accordance with the Multiple-Use Class L guidelines for Visual Resources. Following Congressional action on the wilderness status of each WSA, those designated as wilderness will be subject to Multiple-Use Class C guidelines, while those not designated will become subject to the Visual Resource guidelines specified under the appropriate multiple-use class designation.

CALIFORNIA DESERT CONSERVATION AREA

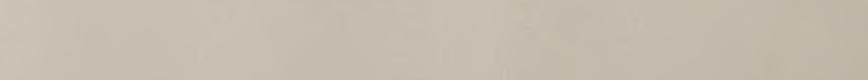
Recreation Opportunities


cdca
FLORAL DISPLAY
BIRDWATCHING
HUNTING
ROCKHOUND
MOTORIZED VEHICLE PLAY
MOTORIZED VEHICLE HILL CLIMB
MOTORIZED VEHICLE SAND DUNE
NON – MOTORIZED VEHICLE
HIKING / BACKPACKING
POPULAR TEACHING / RESEARCHING SITES
NATIONAL REGISTER OF HISTORIC SITES
NATIONAL NATURAL LANDMARKS
B L M CAMPGROUND
B L M RESOURCE OFFICE
INTERPRETIVE / SIGHTSEEING FEATURE
NATIONAL TRAILS (Existing and Proposed)
VISITOR CENTER (Existing)
118°
117°
116°
115°
37°
36°
35°
34°
33°
Mono County
BISHOP
INDEPENDENCE
EUREKA DUNES
WARM SPRINGS
DEATH VALLEY NATIONAL MONUMENT
DARWIN FALLS
PANAMINT CITY
CHINA LAKE NAVAL WEAPONS CENTER
FOSSIL FALLS
WALKER PASS
RIDGECREST
TRONA PINNACLES
NAVAL WEAPONS CENTER
FORT IRWIN MILITARY RESERVATION
ROBBER'S ROOST
RED ROCK CANYON STATE PARK
LAST CHANCE CANYON
CALIFORNIA CITY
OWL CANYON FLORAL DISPLAY
RAINBOW BASIN
BARSTOW
CALICO EARLY MAN SITE
AFTON CANYON
EDWARDS AIR FORCE BASE
Kern County
LANCASTER
MOJAVE
PIPKIN CRATER
SURPRISE CANYON - TANKS
VICTORVILLE
MARINE CORPS BASE
29 PALMS
AMARGOSA CANYON
KINGSTON PEAK SCENIC SITE
TO LAS VEGAS
CLARK MOUNTAIN SCENIC AREA
CIMA DOME
BAKER
BAKER CINDER CONE FIELD
FORT SODA
GOVERNMENT HOLES
MARL SPRINGS TRADING POST
4th OF JULY CANYON
CARUTHERS CANYON
ROCK SPRINGS
PIUTE GORGE
FORT PIUTE
PROVIDENCE MOUNTAINS STATE RECREATION AREA (MITCHELL CAVERNS)
KELSO DUNES
KELSO
KELBAKER FLORAL AREA
WOODS WASH
BIGELOW CHOLLA GARDEN
NEEDLES
PISGAH CRATER
GRANITE MOUNTAIN SCENIC AREA
AMBOY CRATER
FOSSIL SITE
DESERT
WHIPPLE PEAK
MOPAH PEAK / SPRING
PATTON'S CAMP
LOS ANGELES
SAN BERNARDINO
RIVERSIDE
WHITEWATER CANYON
San Bernardino County
Riverside County
JOSHUA TREE NATIONAL MONUMENT
LILY GARDEN
BLYTHE INTAGLIOS
BLYTHE
HANG GLIDING POINT
PAINTED CANYON
CORN SPRING
DEEP CANYON
COACHELLA VALLEY FISH TRAPS
BOTANICAL SITE
Imperial County
CHOCOLATE MTNS GUNNERY RANGE
ANZA BORREGO DESERT STATE PARK
SAN SEBASTIAN MARSH
SAN FELIPE CREEK
SOUTH EMIGRANT ROAD
NAVAL LEASE
SAND HILL NATIONAL LANDMARK
PICACHO PEAK SCENIC AREA
TUMCO MINE
McCAIN VALLEY BOUNDARY AREA
FOSSIL CANYON
EL CENTRO
OLD PLANK ROAD
YUMA
SAN DIEGO
IN - KO - PAH SCENIC SITE
PACIFIC OCEAN

United States
Department of the Interior

Bureau of Land Management
DESERT PLANNING STAFF

recreation in the coming years. The Proposed Plan seeks to maintain the rich diversity of recreational opportunities which BLM - administered lands offer.



I. Motorized Vehicle Access Element

FINDING

Other than those who are simply crossing it, most Desert users travel some of the time on its network of maintained gravel and dirt roads, ways, trails, and accessible dirt washes. There are many of these "routes of travel" in the CDCA.

According to one study the CDCA has 15,000 miles of paved and maintained roads, 21,000 miles of unmaintained dirt roads, and 7,000 miles of vehicle-accessible washes. However, these routes are not evenly distributed and California Desert topography and vegetation does not prevent, and even encourages, cross-country travel in motorized vehicles. Desert soils and vegetation retain the marks of this kind of travel for many years, except in a few places where occasional rains, windstorms and flash floods erase them. Thus, one vehicle traveling cross-country can create a new route of travel. The proliferation of roads and trails in the CDCA which has resulted is a serious problem, the most difficult management issue facing BLM and the public.

Many of the Desert's loveliest and most fragile resources can only be used and enjoyed by vehicle access routes, but these resources are quickly destroyed if vehicles travel everywhere. Most people who go to the Desert revel in its spaciousness and the feeling of solitude and freedom it provides. However, growing numbers of vehicles and interwoven networks of roads and trails damage this solitude and heavy-handed bureaucratic regulations and control would certainly affect the sense of freedom.

The question of managing access to the Desert is especially sensitive because it is confused with the use of vehicles just for play -- dunebuggies, motorcycles, and some four-wheel drive vehicles classed under a general heading of "ORV". In fact, almost any vehicle can go "off-road" in the Desert. Public comments make it clear that motorized vehicle access and off-highway vehicle play need to be clearly separated and managed differently.

While the Bureau is responsible for vehicle use on public lands, much of the control of vehicle travel in the desert will be the responsibility of the user, whether the goal is recreational or commercial. The Bureau of Land Management does not and will not have the funds or people to oversee vehicle use throughout the desert at all times. Therefore, rules for vehicle use must be fair, understandable, easy to follow, and reasonable if they are to be publicly accepted, for only commitment by the public, the owners of these lands, will ensure their success.

ELEMENT OUTLINE

1. GOALS
2. ACTIONS PROPOSED
   a. Vehicle Designations
   b. Application of "Limited" Designation
   c. Stopping and Parking
   d. Access on Washes, Dunes and Dry Lakes
3. IMPLEMENTATION
   a. Priorities
   b. Designation Process
   c. On-the-ground Implementation
   d. Designation Revisions
   e. Vehicle Access Pending Implementation of Designation
   f. Monitoring
   g. Enforcement, Compliance and Cooperation
   h. Limitations During Interim Management

1. GOALS

The goal of the Motorized Vehicle Element is to provide a system and set of rules governing access to the CDCA by motor vehicles. Specific objectives included are to:

a. Avoid or minimize damage or degradation of the natural, cultural and aesthetic values of the Desert.

b. Provide a reasonable network of "routes of travel" which meets the needs of Desert users, including commercial users and BLM's "neighbors," the private landowners and other public land managing agencies in the CDCA.

c. Reduce to the greatest possible degree conflicts among Desert users.

d. Provide an element that is understandable, easy to follow, acceptable, and supported and encouraged by most Desert users.

e. Implement and manage these programs efficiently, economically, and cooperatively.

f. Provide for "appropriate" use of off-road recreational vehicles as directed by FLPMA and in conformance with Executive Orders 11644 and 11989.

2. ACTIONS PROPOSED

The goals of the element will be accomplished by: establishing rules for managing motorized vehicle access on public lands; designating areas for appropriate vehicle access; and implementing designations and monitoring programs.

a. Vehicle Designations

In accordance with legislation and policy, all public land in the California Desert is designated "open", "closed", or "limited" for vehicle use.

These designations are made on the basis of multiple-use classes with certain site-specific designations and exceptions as set forth in this element.

Laws, executive order, policy and regulations which cover motor vehicle use on public lands are described in detail in Appendix VI.

The vehicle access designations and their locations in the CDCA are established by the Plan as follows:

1) OPEN

Vehicles may travel anywhere within the area. This will apply to 1) those lands in Class I specifically designated "open" for vehicle travel as shown on the map with this element, and 2) certain sand dunes and dry lake beds as listed in Table MV-1.

2) CLOSED

No vehicle travel is allowed. This will apply to: 1) all wilderness areas when established by Congress, 2) land in ACECs where provided for in the Management Plan for that ACEC, and 3) certain sand dunes and dry lake beds as listed in Table MV-1.

3) LIMITED

Vehicle access will be on "routes of travel" in accordance with the rules for each multiple-use class or special area as outlined in this element. This will apply to: 1) all lands in Classes L and M, with differences explained below, 2) any land in Class I that is not specifically designated "open," 3) land in Class C prior to its establishment as wilderness by Congress, and 4) land in ACECs and Special Areas in accordance with the area's Management Plan.

b. Application of "Limited" Designation

"Limited" designated vehicle access means that motor vehicle access is only allowed on certain "routes of travel", which include roads, ways, trails and washes. Seasonal closures, speed limits. etc. may be applied (see Appendix VI). Designated vehicle access as it applies to Class L and Class M is as follows:

In Class L only those "routes of travel" that are specifically approved may be used by motor vehicles. Identification of these approved routes will be done by maps and signs. This will also apply to Class C prior to wilderness established by Congress and to ACECs where motor vehicle access is allowed in the Management Plan.

In Class M existing "routes of travel" may be used for motor vehicle access, except those that are specifically identified as closed. "Existing routes of travel" are defined as all routes established before December 31, 1977, (the date of full aerial photo coverage of the CDCA). This will also apply to any areas in Class I not designated as open.

Both Class M and Class L routes will require immediately initiating identification and/or mapping. Class M areas may be subject to proliferation of roads, ways, or trails either intentionally or unintentionally. This will necessitate rapid means of identifying the existing network of routes, monitoring to see if impacts increase, and action to further limit or designate routes if this proliferation occurs.

c. Stopping and Parking

Stopping and parking along "routes of travel" will be limited to within 100 feet of the route. In some locations, specific parking or stopping areas may be signed open or closed in order to protect fragile or sensitive resource values adjacent to the route or provide a safe place to stop. The intent of this policy is to curtail the uncontrolled widening and/or extending of access routes by vehicles stopping or parking along the route.

d. Access on Washes, Dunes and Dry Lakes

WASHES

Vehicle access using Desert washes will be governed by the designation for the area in which the wash is located. In areas designated "closed," vehicle access in Desert washes will be prohibited. In areas designated "open," vehicle access in Desert washes will be permitted. In all "limited" areas, vehicle use in Desert washes will be restricted to "existing" (Class M) or "approved" (Class L) vehicle routes of travel. In addition, washes as access routes may have some type of travel limitation, e.g., speed limits, seasonal closure, etc., imposed in order to protect the resource values found in or along the wash.

SAND DUNES AND DRY LAKES

Because of the unique geographical nature of these areas, "routes of travel" cannot be readily delineated. Therefore, significant sand dunes and dry lakes within the California Desert are designated either "open" or "closed" to vehicular travel regardless of the multiple-use class in which the dune system or dry lake is located. The management objective for each dune system or dry lake will dictate the area's vehicle use designation. Special monitoring requirements will be needed to protect the resource values in these areas. See Table MV-1, below.

TABLE MV-1

Designated Vehicle Access for Significant Dry Lakes and Sand Dunes in the CDCA

	Class	Motor Vehicle Access
A. Dry Lakes		
1. Salt Dry Lake	L	Closed
2. Mesquite Dry Lake	M	Closed
3. Ivanpah Dry Lake[1]	L	Closed
4. Silurian Dry Lake	I	Open
5. Superior Dry Lake[1]	L	Closed
6. Harper Dry Lake	L	Closed
7. El Mirage Dry Lake	I	Open
8. Soggy Dry Lake	I	Open
9. Melville Dry Lake	I	Open
10. Means Dry Lake	I	Open
11. Soda Dry Lake	L	Closed
B. Sand Dunes		
1. Eureka Dunes	C	Closed
2. Saline Dunes	L	Closed
3. Panamint Dunes	C	Closed
4. Dumont Dunes	I	Open
5. Devil's Playground	L	Closed
6. Kelso Dunes	C	Closed
7. Cadiz Dunes	L	Closed
8. Imperial (Algodones) Sand Dunes	C,L,& I	Open/Closed

[1] Open to Nonmotorized Vehicle Access (See Recreation Element)

3. IMPLEMENTATION

a) Priorities

Prioritity for on-the-ground implementation of vehicle designations will be established based on the following considerations in order of priority:

1. Due to the sensitivity of the inventoried resource values, highest priority will be given to Multiple-Use Class C, WSA and L areas, and ACECs and Special Areas which are currently experiencing vehicle use inconsistent with the management objectives.

2. Priority will be given to marking the boundaries of those open areas in Class I where high potential for confusion over boundaries exist.

3. Multiple-Use Class M areas which are currently experiencing vehicle use inconsistent with the management objectives.

4. Multiple-Use Class C, and L areas in which there is little intensive vehicle use.

5. The remainder of Multiple-Use Class M areas and Multiple-Use Class I areas.

b. Designation Process

Approval of the plan will constitute the designation of all public lands in the CDCA. All "open" and "closed" areas will become immediately designated and appropriate documentation actions will be initiated. Limited "routes of travel" will not be immediately "approved" in Class L and closed routes will not be immediately identified in Class M. These routes will become effectively designated after mapping and signing on the ground as appropriate.

c. On-the-ground Implementation

Vehicle management designations, "open," "closed" and "limited," will be commensurate with the multiple-use class management objectives for each area. While vehicle access designations generally follow multiple-use class boundaries, there are several cases where the area's vehicle designation may be either more restrictive or less restrictive than that of the surrounding multiple-use class. Examples include ACECs, Special Areas, sand dunes, and dry lakes. Designated vehicle access as it generally will be applied is described below:

MULTIPLE-USE CLASS I

Generally three types of vehicular access needs fall into this multiple-use class: 1) access for motorized recreation vehicle free play open areas, 2) intensive mining areas, and 3) intensive energy development areas. Public lands in Multiple-Use Class I will be either "open" or "limited to existing routes of travel." Vehicle use in open areas is restricted by the operating regulations and vehicle standards set forth in 43 CFR 8431 and 8343. "Open" area designations are effective with Plan approval. Other designations will be completed by 1987.

Motorized recreation vehicle "play areas" will be signed and identified on maps for public distribution. (See Recreation Element for complete discussion of recreation vehicle "play areas.")

MULTIPLE-USE CLASS M

Implementation of "Existing Routes of Travel" will involve preparing a series of maps based on the aerial photos. These maps will be published and distributed. By basing the identified vehicle routes on the aerial photo coverage, continued proliferation of vehicle routes can be clearly documented and corrective action taken.

Maps will be produced and distributed as soon as possible after approval of the Plan within 2 years of Plan approval. On-the-ground signing primarily of "closed" areas will be completed by December, 1987. Wherever possible natural, and/or physical barriers will be used to close area routes rather than a multitude of signs.

MULTIPLE-USE CLASS L

Access in Multiple-Use Class L is designated as "limited to approved routes of travel." Actual on-the-ground route designation for Class L will be completed within two years after approval of this plan.

In Multiple-Use Class L areas, vehicle access is limited to only those routes approved and marked as vehicle access routes. Routes not "approved" for vehicle access in most instances will be obliterated, barricaded, signed, or shown on maps. Unless signed as a vehicle "route of travel," all vehicle routes in the multiple-use class are "closed" to vehicle access.

Route Designation Factors - Multiple-Use Class L

Decisions on approval of vehicle routes for Class L will be based on an analysis of each situation, using the following decision criteria:

1) Is the route new or existing?

2) Does the route provide access for resource use or enjoyment?

3) Are there alternate access opportunities?

4) Does the route cause considerable adverse impacts?

5) Are there alternate access routes which do not cause considerable adverse impacts?

MULTIPLE-USE CLASS C

All public lands in Multiple-Use Class C are recommended as suitable for wilderness (See Wilderness Element). Congressionally designated wilderness areas are, by law, closed to motorized vehicle use. Accordingly, as Congress acts and designates these or any other areas as wilderness the public lands will be designated "closed" to vehicle use. On-the-ground implementation will involve boundary signing and maps.

Vehicle use on lands recommended as suitable for wilderness, but not yet designated by Congress as wilderness, will be managed as "limited" to designated routes of travel" commensurate with Multiple-Use Class L (see Wilderness Element). Limitations on vehicle access are necessary to protect wilderness values as well as other significant resources.

Any vehicle access routes within the suitable WSA will be analyzed in management plan preparations.

d. Designation Revisions

Decisions on vehicle route designation are intended to meet present access needs as well as to protect sensitive resource values. Future access requirements will necessitate amendments to ensure the management objectives are being realized. For mining operations, additional access needs will be considered in accordance with the Bureau's Exploration and Mining - Wilderness Review Program regulations (43 CFR 3802) and, as finalized, Surface Management of Public Lands under the U. S. Mining Laws (43 CFR 3809).

Access needs for other uses, such as roads to private lands grazing developments, or communication sites, will be reviewed on an individual basis under the authority outlined in Title V of FLPMA. Each proposal will be evaluated for environmental effects and subjected to public review and comment. As present access needs become obsolete or as considerable adverse impacts are identified through the monitoring program, these designations will be revised.

e. Vehicle Access Pending Implementation of Designation

In Multiple-Use Class I, M, and L areas not in "open," "closed," or "WSA" status, vehicle use will be restricted to an interim access network of vehicle routes appearing in the California Desert Conservation Area Interim Critical Management Plan. These routes appear as a series of 22 maps which have been available to the public during the implementation of the ICMP. As on-the-ground implementation of the vehicle designations in these multiple-use classes are completed, vehicle routes may be added to or subtracted from this network following on the procedures outlined in this element. Legitimate access needs which do not appear as vehicle routes on this series of maps will be added to this interim network on a case-by-case basis.

In Multiple-Use Class C, vehicle use will occur as if the area were Multiple-Use Class L.

In WSAs, vehicle use will be managed as outlined for each multiple-use class above, the Interim Management Policy, or according to the ICMP designation, whichever is more restrictive.

f. Monitoring

A major component of the vehicle access designation process is the monitoring of impacts resulting from these designations. The analysis of impacts and reassessment of management decisions is an integral part of the Bureau's response to the legislative mandate.

The primary objectives of the motorized vehicle access monitoring program are to:

a. Identify and document when unacceptable levels and kinds impacts to natural, cultual and historic values.

b. Identify when impacts will preclude corrective or rehabilitative actions;

c. Identify the type of vehicle equipment and/or related use which is causing, or likely to cause, impacts; and

d. Provide the information necessary to make immediate and long-range decisions on the use or prohibition of vehicles on designated or existing access routes.

Recommendations of monitoring efforts must be specific to each individual area, taking into consideration such issues as access needs, use levels, user conflicts, and impacts to resources. Monitoring efforts may vary. Monitoring techniques include field observations, remote sensing, ground photographs and environmental study plots.

When the land manager determines that other than resource management activity plan objectives or multiple-use class guidelines for the area crossed by the access route(s) are or may be degraded by vehicular travel, revisions in the vehicle designation will be made. The option to designate or close specific travel routes within Multiple-Use Class M areas and the continual updating of vehicle designations in Multiple-Use Class L will be held available to the manager.

Region 1 of the U.S. Forest Service has developed comprehensive guidelines for ORV monitoring plans (see Appendix VI). These guidelines will be used by the Bureau in developing specific monitoring plans for the CDCA.

g. Enforcement, Compliance and Cooperation

Enforcement of these vehicle designations will rely heavily on indirect, cooperative actions, such as voluntary compliance, peer pressure, public information brochures and maps, educational/awareness programs, and access route signing. Access designation planning will be done in close coordination with Desert users so that all legitimate access needs can be incorporated into the designation. In sensitive areas or where these compliance methods are not successful, other methods will be employed. These methods include emergency closures, special access permits, issuance of right-of-way easements, or further restriction of the route(s) in question to provide additional use limitations (season of use, limitations on the number of types of vehicles permitted, speed limits, etc.). Direct law enforcement, either by contractual agreement with local law enforcement agencies, or by Bureau Rangers and/or Visitor Services Specialists, will be a last resort option.

Vehicle access needs will be a high priority project in the implementation of vounteer service projects. These projects tasks will include sign placement, obliteration of closed routes, and identification of access needs.

h. Limitations During Interim Management

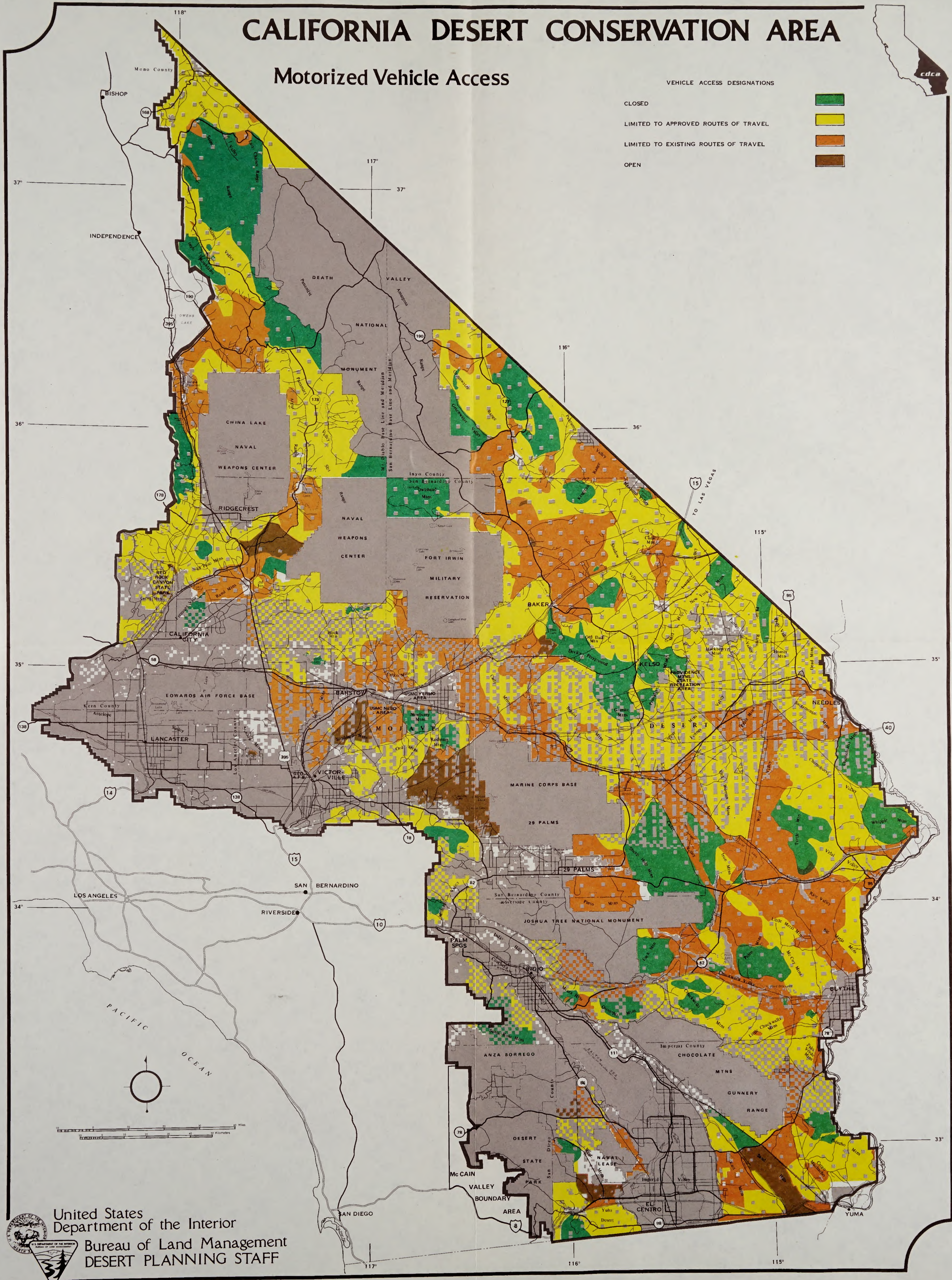
"The Interim Management Policy and Guidelines for Lands Under Wilderness Review" states that no lands will be closed to vehicle use solely because they are under wilderness review, and that unless use by motorized vehicles is threatening to impair an area's wilderness suitability vehicle use may be permitted on existing ways and trails. Vehicle designations may be more restrictive than existing vehicle routes if those designations are based on identified resource values other than wilderness. While wilderness interim management policy normally will preclude vehicle closures in Multiple-Use Class C areas, closures could be made for resource values other than wilderness.

Implementation of vehicle management designations in Multiple-Use Classes I, M and L will use this Interim Management Policy except where the access designation would be more restrictive. In those cases the more restrictive of either designation or Interim Management Policy will prevail. The nonimpairment standard requires that the threshold levels for the determination of "considerable adverse impacts" will be more stringent for WSAs than those for non-WSA areas.

Route(s) will be appropriately designated to manage the type of vehicle impacts creating a threat to wilderness suitability. Monitoring and surveillance of vehicular use in WSAs will be a priority in Plan implementation.

CALIFORNIA DESERT CONSERVATION AREA

Motorized Vehicle Access


VEHICLE ACCESS DESIGNATIONS
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LIMITED TO EXISTING ROUTES OF TRAVEL 🟧
OPEN 🟫
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117°
116°
115°
37°
36°
35°
34°
33°
Mono County
BISHOP
INDEPENDENCE
OWENS LAKE
DEATH VALLEY NATIONAL MONUMENT
CHINA LAKE NAVAL WEAPONS CENTER
RIDGECREST
NAVAL WEAPONS CENTER
FORT IRWIN MILITARY RESERVATION
Inyo County
San Bernardino County
Owlshead Mtns
TO LAS VEGAS
RED ROCK CANYON STATE PARK
CALIFORNIA CITY
BAKER
KELSO
PROVIDENCE MTNS STATE RECREATION AREA
EDWARDS AIR FORCE BASE
Kern County
Antelope
LANCASTER
Los Angeles County
BARSTOW
USMC YERMO AREA
USMC NEBO AREA
MOJAVE
DESERT
NEEDLES
VICTOR VILLE
MARINE CORPS BASE 29 PALMS
29 PALMS
San Bernardino County
Riverside County
JOSHUA TREE NATIONAL MONUMENT
PALM SPGS
INDIO
BLYTHE
SAN BERNARDINO
LOS ANGELES
RIVERSIDE
PACIFIC OCEAN
ANZA BORREGO DESERT STATE PARK
Imperial County
CHOCOLATE MTNS GUNNERY RANGE
NAVAL LEASE
McCAIN VALLEY BOUNDARY AREA
EL CENTRO
YUMA
SAN DIEGO
Miles
Kilometers

United States
Department of the Interior

Bureau of Land Management
DESERT PLANNING STAFF

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Vehicle access needs will be a high priority project in the implementation of

J. Geology–Energy–Minerals (G-E-M) Resources Element

FINDING

The CDCA is one of the most diverse geologic regions of the United States. Remarkable geologic resources exist within the area, including important mineral and energy resources. Some of these resources are vitally important in national and international economics.

In addition to those energy and mineral resources which have been or are currently being developed, the CDCA possesses vast untapped mineral potential.

ELEMENT OUTLINE

1. GOALS
2. ACTIONS PROPOSED
    - a. Maintenance of the G-E-M Data Base
        - 1) Construction and Analysis of the Data Base
        - 2) Mineral Economics
        - 3) Evaluation of Potential
    - b. Proposed Plan Guidelines for Mineral Exploration and Development
3. IMPLEMENTATION
    - a. User - Initiated Actions
    - b. BLM - Initiated Actions
    - c. Limitations During Interim Management

1. GOALS

The general goals of the G-E-M Resources Element are to:

a. Involve BLM actively, within the multiple-use management framework, with the users of all resources in the development and use of techniques to simultaneously enhance the productive potential of G-E-M resources and the quality of the environment.

b. Provide access to and availability of as much public land as possible for mineral exploration and development. The widespread availability of land and access is a crucial factor in maintaining the outstanding productive potential of G-E-M resources.

c. Maintain the current data base and analysis of G-E-M resources, incorporating new and emerging resources and to use these data in the regular Plan revisions.

In addition, specific objectives of the element are to:

a. Provide ways of access and opportunities for exploration and development on public lands which are assessed to have potential for critical mineral resources, those minerals of national defense importance, those of which the U.S. imports 50 percent or more, and those of which the U.S. is a net exporter.

b. Provide ways of access and opportunities for exploration and development on public lands which are assessed to have potential for energy mineral resources. These are geothermal, oil, gas, uranium, and thorium, considered to be paramount priorities both nationally and within the State of California.

c. Provide ways of access and opportunities for exploration and development on public lands which are assessed to have potential for mineral resources of local and State importance. These are sand and gravel, limestone, gypsum, iron, specialty clays, and zeolites. (Since this analysis was made (June 1980), zeolites have become of national importance.)

2. ACTIONS PROPOSED

This element is not a technical report on the G-E-M resources of the CDCA. It does contain very brief descriptions of these resources, their economic importance, the potential for energy and minerals, management objectives and proposed actions.

a. Maintenance of the G-E-M Data Base

Although many of the actions proposed for this element are responses to project proposals of mineral exploration and development and other related activities, the full accomplishment of the objectives of this element requires that the Bureau maintain an accurate and comprehensive information base of G-E-M resources in the CDCA. A brief discussion of the BLM G-E-M data base methodology, its results, and planned future use follows.

1) CONSTRUCTION OF THE CDCA G-E-M DATA BASE

A thorough search and evaluation of the available geologic, paleontologic, structural, geochemical, geophysical, and mineral data on G-E-M resources in the CDCA demonstrated that the quantity, and, occasionally, the quality, of the data was not satisfactory and that additional data was needed for a minimally adequate data base. To accomplish this, a program for the inventory, analysis and evaluation of CDCA G-E-M resources was initiated. (Description of this program is provided in Appendix XII.) This effort involved 15 BLM geologists working a total of over 250 work months dispersed over a period of five years, to the end of fiscal year 1980. Twelve separate projects done under contract for the BLM, supplemented staff's work (the list of contracts and their descriptions is contained in Appendix XIV.). The final report of each contract is available for inspection and/or study by the public in the BLM California Desert District Office in Riverside, California (formerly the Riverside District Office). The total cost of this effort, BLM work and contracts combined, is estimated at $1 million, or 4 cents per acre for the entire CDCA, or 8 cents per acre for the BLM-managed public land in the CDCA.

To facilitate the analysis and interpretation of the data-base the CDCA was sub-divided into 92 units based primarily on geology and mineral resources and secondarily on planning boundaries. Of these 92 units, 17 are within the National Parks or military areas of jurisdiction and are not of direct concern of this Plan. The remaining 75 units, called G-E-M resources areas (GRA), enclose approximately 18.03 million acres of mainly Federal land managed by BLM, private and State land. The G-E-M data were analyzed first on GRA basis, and then integrated into a regional overview. The data for 29 of the 75 GRAs had been analyzed and interpreted by the time the writing of the Plan commenced. The remaining 46 GRAs will be completed in the immediate future (see the Implementation of this element). The GRA reports are BLM administrative reports available in the California Desert District G-E-M Resources files. (Details on analysis methodology are provided in Appendix XIV).

Analyzing the geologic data provided an understanding of the CDCA geologic environment, the geologic and paleontologic resources, and the potential for energy and mineral resources within these geologic environments.

Some of these resources are known to be significant in the CDCA. California is third in the nation in value for mineral production. Excluding oil and gas, the CDCA produces 50 percent of the State's revenue from mineral resources (1979 figures).

Forty-six mineral commodities plus geothermal and CO_2 are known to exist in the CDCA. Of these, 19 are metallic, 18 are non-metallic, and nine are saline minerals.

Six of the 19 minerals which the U.S. imports 50 percent or more are known to exist in the CDCA, and four of the six are being produced or have been produced in the CDCA (based on USBM 1979 figures in Mineral and Material/A monthly survey - May 1980). Approximately 15 percent of the United States talc, 10 percent of crude gypsum, and 5 percent of its iron are produced in the CDCA. The CDCA also produces the majority of the U.S. borates and most of the world's rare earth elements.

Geothermal resources are associated with young, active areas of concurrent faulting and volcanism. The oil and gas potential of the CDCA falls in two categories. One is associated with marine Miocene age sedimentary rocks of the Antelope and Imperial Valleys. The other is of Paleozoic age and is associated with the "Overthrust Belt" which begins in central Alberta; swings into Montana, Wyoming, Utah, Nevada, eastern CDCA; back into Arizona; and down into Mexico.

2) MINERAL ECONOMICS

A mineral economic evaluation program was initiated as a preliminary study of the areas of major mineral production, reserves, and resources in the CDCA. (Definition of these terms is given in Appendix XIV). All available data from past and present production, reserve, and resource quantities were compiled and a dollar value was assigned to each area based on the published average price of each commodity in calendar year 1978 (Engineering and Mining Journal, February 1979). All past production was converted to 1978 prices to allow for comparison of various areas in terms of today's values.

Of the 46 known mineral commodities in the CDCA, 25 were selected for evaluation. These commodities were selected on the basis of the following four criteria: 1) the commodity is on the official strategic mineral stockpile list; 2) the United States imports 50 percent or more of the commodity; 3) the United States is a major exporter of the commodity on the international marketplace; and 4) the commodity is of local or regional economic importance to the California or U.S. domestic economy.

The quantity of each commodity, their 1978 in-place dollar value, the United States import/export position, the projected domestic consumption demand, and the mining status in the CDCA are given in Table G-1. In-place value is the value of a commodity in the ground as a raw, not extracted, material. The same data is presented in graphic form as the CDCA Mineral Economics Map (G-E-M Element Map No. 1).

The total known in-place value of the 25 commodities chosen for study is in excess of 648 billion dollars (in 1978 commodity values). Of the Group I commodities (strategic list commodities), the major resources are in molybdenum, tungsten, and silver. Of the Group II commodities (greater than 50 percent import dependence), strontium is the most abundant in the CDCA. In Group III (major exports to the world market place), the CDCA is the major source of the western world's supply, and mineral reserves. of borates. rare earths, and soda ash (sodium carbonate). In Group IV commodities (local and regional economic importance), the CDCA is producing, and has large extractable reserves of, gypsum, limestone, iron ore, zeolites, sand and gravel, and geothermal energy.

The CDCA is a past producer of a wide variety of mineral commodities, is currently producing a substantive amount from several locations, and has an excellent potential for future production of mineral commodities. The future importance of energy and minerals from the CDCA is expected to increase for at least eight commodities (see Appendix XIV). Recent developments in new exploration techniques and concepts and in field investigations have revealed the existence of several previously unsuspected mineral environments which have resulted in several discoveries of economic significance. These are disseminated and sedimentary copper deposits, porphyry molybdenum deposits, a possible cobalt zone, uranium deposits, and important deposits of zeolite (a more detailed evaluation of the mineral economic potential of the CDCA, the methodology, and individual commodity reports is provided in Appendix XIV).

3) EVALUATION OF POTENTIAL

Using the G-E-M resources mineral data and respective analysis and interpretation, each of the 29 GRAs was evaluated as to its potential for energy and mineral resources. A classification scheme which takes into consideration past and present production, known geologic environment, and importance of the respective commodity was used. The classification is included in each GRA report with the rationale for the classification and a map at 1:250,000 scale for the respective area. (See Appendix XIV for details).

As part of a BLM contract, an independent panel of ten geologists and mining engineers specializing in all types of energy and mineral resources, and who have considerable experience in the California Desert, have evaluated practically the same data base, but only for a three-day period. During this review, they produced maps of the CDCA showing classification of the land as to its potential for different groups of energy and mineral resources. The results of this work were used in BLM's classification.

The results of the classification of potential for the 29 GRAs analyzed, which totalled 7.59 million acres, were integrated in a CDCA-wide map at 1:250,000 scale showing potential for locatable and for saleable mineral resources. For leasable mineral resources the classification of potential provided by the U.S. Geological Survey Conservation Division was used (See USGS Admin. Report - Appendix XIV). The energy mineral resources map is a combination of geothermal, the oil and gas classification and the classification for uranium from the locatable mineral resources. These maps, at 1:250,000 scale, are available in the California Desert District Office in Riverside.

The maps presented with this element (located at the end of the element narrative) are simplified maps which were prepared first at the 1:250,000 scale and then photographically reduced. The simplification consisted in first consolidating the 11 mineral classes into five classes (for locatable) and then, on the original classification maps, aggregating in the same way the areas of the respective classes. The description of the simplified classification is provided in Appendix XIV and also shown in the legend of each G-E-M Resources Map attached to this element (Map Nos. 17, 18, 19, and 20).

Since the first and most basic need for finding energy and mineral resources is availability of land, the provisions made to completely or partially restrict mineral activity in the multiple-use class guidelines may indirectly discourage the search for these resources. Following is an explanation of the classification of these resources as presented in this element. (See also Tables G-2, G-3, and G-4 at the end of this element.)

Locatable Minerals

For locatable minerals (Map No. 17), 7.59 million acres were classified. Within these slightly over 5.9 million acres have different levels of potential, while the balance of 1.6 million acres were not classified due to insufficient data (shown as Class 5 on the map).

Leaseable Minerals

For leasable minerals, (Map No. 18) as was previously mentioned, the USGS Conservation Division classification was used. The acreage measurements show a total of 2.6 million acres considered of different levels of potential for sodium and potassium minerals, 2.4 million acres are considered to have potential for oil and gas and over 1.67 million acres are considered to have potential for geothermal resource. The 118,720 acres of Known Geothermal Resource Area (KGRA) classification are included. However, the oil and gas figures include only parts of what may be potential within the area in eastern CDCA known as the Overthrust Belt.

Saleable Resources

For saleable minerals (Map No. 19), which are most important in the CDCA, the staff's survey is very conservative due to insufficient data. Nevertheless, over 2.1 million acres were classified as having potential for these resources. As mentioned previously, zeolite minerals, which during our classification were considered to be only of local and State importance, have since become of national importance.

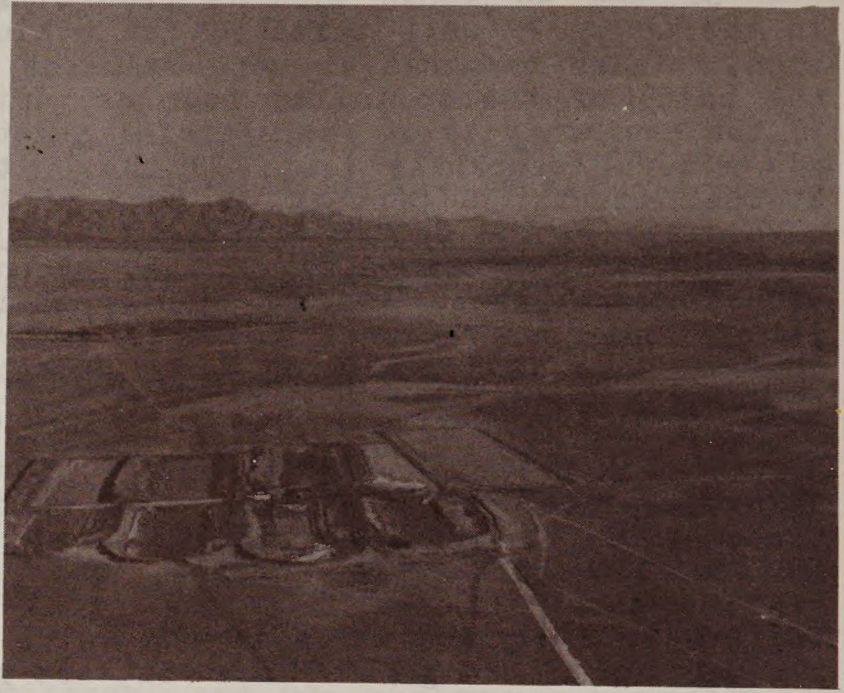
Energy Georesources

A map aggregating the classification for Energy Georesources (Map No. 20) has been prepared to define areas within the CDCA which have potential for energy resources. Included in this map are areas with oil and gas potential, the portion of the Overthrust Belt which falls in the CDCA, areas of geothermal potential, areas considered anomalous for uranium and thorium on the basis of airborne gamma-ray surveys, and point data (occurrences, geochemical samples, and water samples) of interest also for uranium and thorium. Acreage for uranium was measured to be 860,940 acres.

b. Proposed Plan Guidelines for Mineral Exploration and Development

1) MULTIPLE-USE CLASS PROVISIONS

All mineral explorations and mining operations in Multiple-Use Classes C, L, M, and I would be subject to the Bureau's surface mining regulations under 43 CFR 3802 and proposed regulations under 43 CFR 3809. Under the proposed 3809 regulations surface disturbing operations would be regulated to prevent "undue degradation" of the public lands and to provide adequate environmental safeguards in the conduct of surface disturbing operations. The existing 3802 regulations apply to Wilderness Study Areas, and prohibit impairment of Wilderness suitability.



Cadiz Dry Lake
Evaporation ponds for the recovery
of calcium chloride

Additional consideration would be given to significant surface disturbing operations in Class L and in Areas of Critical Environmental Concern (ACEC), where an EIS will be prepared unless the proposed operation will not significantly affect the quality of the environment. If that is the case, this conclusion must be reached as a Finding of No Significant Impact by the district manager and appropriately published to insure adequate public notice. Under proposed 43 CFR 3809.1-2, some specific operations are exempt from these requirements and are as follows:

A plan of operations is not required when:

(a) Searching for and occasionally removing mineral samples or specimens;

(b) Operating motorized vehicles over "open use areas and trails" or "limited areas and trails" as defined in Subpart 8340 of this Title, so long as the vehicles conform to the operating regulations and vehicle standards contained in that subpart, and do not violate the restrictions of limited areas and trails;

Trona Pinnacles: Calcareous tufa spires formed during the Pleistocene Period

(c) Maintaining or making minor improvements of existing roads, trails, bridges, landing areas for aircraft, or other facilities for any other means of access where such improvement or maintenance does not alter the alignment, width, gradient, size, or character of such facilities; or,

(d) Making geological, radiometric, geochemical, geophysical, or other tests and measurements using instruments, devices, or drilling equipment which are transported without using mechanized earth moving equipment or tracked vehicles.

Mining and exploration plans are required in Multiple-Use Classes L, M, and I under proposed 43 CFR 3809.1-1 as follows:

An approved plan of operations would be required prior to commencing:

(a) Any mining operations which involve construction of roads, bridges, landing areas for aircraft, or improving or maintaining such access facilities in a way that alters the alignment, width, gradient, size, or character of such facilities;

(b) Any mining operations which destroy trees two or more inches in diameter at the base;

(c) Mining operations using tracked vehicles or mechanized earth moving equipment such as bulldozers or backhoes;

(d) Any mining operation using motorized vehicles over other than "open use areas and trails" as defined in Subpart 8340 of this Title "Off-Road Vehicles," or which violate the restrictions of limited areas or trails unless the use of a motorized vehicle is covered by a temporary use permit issued under Subpart 8372 of this Title.

(e) The construction or placing of any mobile, portable, or fixed structures on public lands for more than 30 days;

(f) Any mining operations requiring the use of explosives; or

(g) Any operation which may cause changes in a water course.

Any expansion of a grandfathered operation that exceeds the "manner and degree" clause of 43 CFR 3802 is subject to these regulations.

Mineral leasing in Multiple-Use Class L would be subject to an EIS procedure if the "significant" criteria is exceeded. All other leasing activities in Classes L, M, and I would be processed in accordance with the Bureau's existing EAR process as provided for in 40 CFR 1500 and 43 CFR 3100, 3200, and 3500.

Mineral material sales in Classes L, M, and I would be processed under 43 CFR 23 and 3600.

In addition, in Class L, only existing extraction areas can be used for current needs. If a new extraction area in Class L is required, then it would be handled as a programmatic EIS over the entire area of potential extraction, not in one specific site. The EIS procedures would follow the "tiering" procedures specified in 40 CFR 1508.28.

2) SPECIAL PROVISIONS FOR THE SALTON SEA

While the area surrounding the Salton Sea has been excluded from the multiple-use classification (See Map No. 2, "Proposed Plan," in the back cover pocket of this document), due to the sensitive nature of the Salton Sea, which is potential habitat for some federally listed rare and endangered wildlife species, the guidelines for Class L will apply to all mineral leasing activities (oil, gas, geothermal, sodium and potash) on public land in and under the Salton Sea.

3) STATE MINING AND RECLAMATION ACT OF 1975

The current 43 CFR 3802 and proposed 43 CFR 3809 surface management regulations are somewhat more stringent than the State of California's Mining and Reclamation Act of 1975. It is the Bureau's policy, as stated in the Master Memorandum of Understanding between the State Director of the BLM and the State Resources Agency dated February 1979, to continue to coordinate the Bureau's requirements with those of the State of California and to use a joint participation process.

3. IMPLEMENTATION

BLM management of G-E-M resources falls into two basic categories, user-initiated and BLM-initiated. Upon plan approval the following actions will occur.

a. User - Initiated Actions

Requests such as mining plans, mineral lease applications, will be processed within the shortest possible time. Users will be promptly informed of management decisions. BLM will work closely with users to develop mutually acceptable plans when conflicts arise. Prompt processing of public demand requests will avoid costly delays of possible resource development.

b. BLM - Initiated Actions

1) Complete the analysis of the 46 GRA units which were not analyzed before the preparation of the Plan.

2) Prepare and finalize all GRA reports and new maps showing potential for the locatable, leasable, saleable, and energy mineral resources.

3) Integrate and interpret all available data for the purpose of defining mineralization models. These models would be computerized and used in and out of CDCA inventory.

4) Integrate and reinterpret the GRA reports on a regional (CDCA) basis. A technical report for desertwide G-E-M resources would be prepared. This report would be published so that the taxpayer can easily benefit from this effort. This would also have the effect of new data being brought to BLM's attention by users.

5) Complete the ground investigation of those areas considered anomalous on the basis of geochemical, geophysical, and/or remote sensing surveys performed during the initial CDCA inventory.

6) Generate new data where and/or when it is considered necessary for the data base.

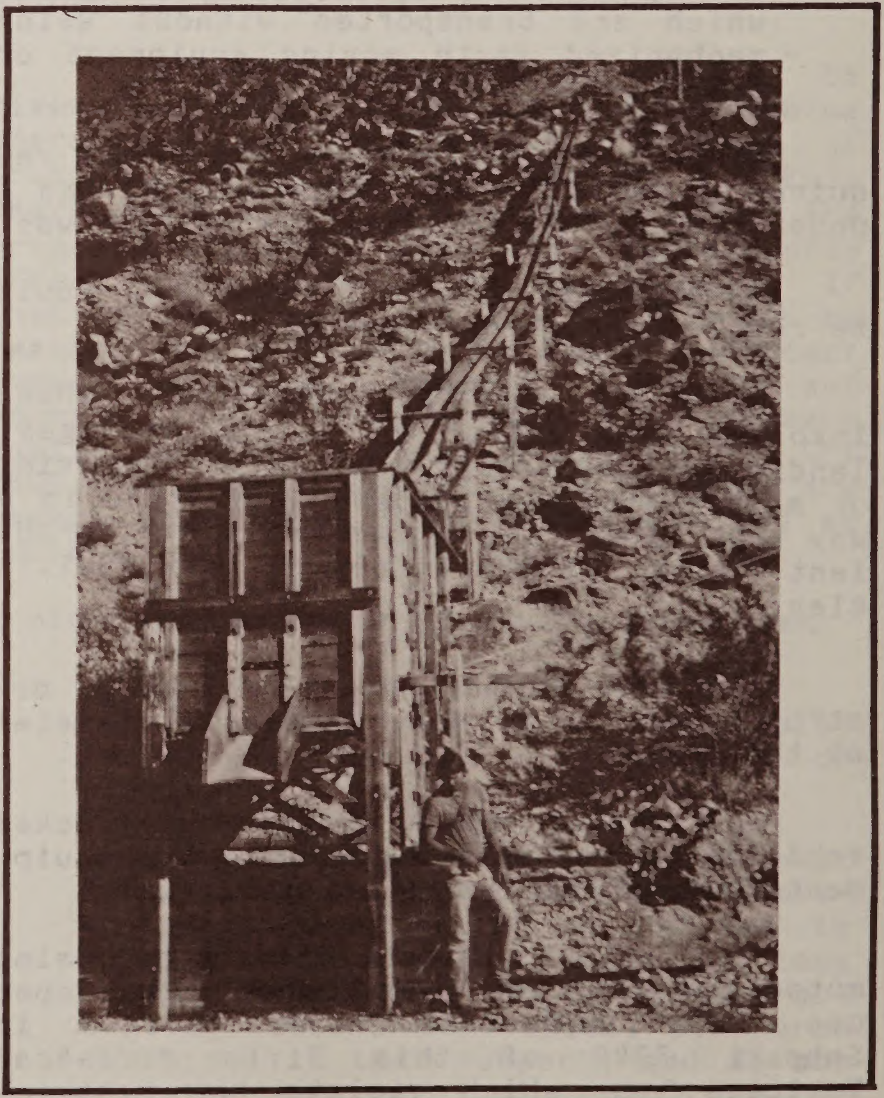
7) Reanalyze and reinterpret the database for the entire CDCA on a regular basis, no longer than every five years.

c. Limitations During Interim Management

All mineral exploration and surface mining operations that are not grandfathered under Section 603 of FLPMA are subject to the Bureau's surface mining mandate that all surface mining and exploration operations conducted within a Wilderness Study Area (WSA) must be conducted in such a manner as not to impair the suitability of the area for wilderness. The two main criteria involved are the reclamation potential of the disturbed area and how the disturbed site affects the WSA as a unit, not on a localized basis.

Specific activities in WSAs are exempt from these restrictions and are specified under 43 CFR 3802.1-2. These are identical to the proposed 43 CFR 3809.1-2 exemptions listed under the Action Proposed section of this element (Subsection 2b).

Mining and exploration plans would be required in WSAs as specified in 43 CFR 3802.1-1 as follows:



Loading bin of gold mine - Argus Range

(a) Any mining operations which involve construction of means of access, including bridges, landing areas for aircraft, or improving or maintaining such access facilities in a way that alters the alignment, width, gradient, size, or character of such facilities;

(b) Any mining operations which destroy trees two or more inches in diameter at the base;

(c) Mining operations using tracked vehicles or mechanized earth moving equipment, such as bulldozers or backhoes;

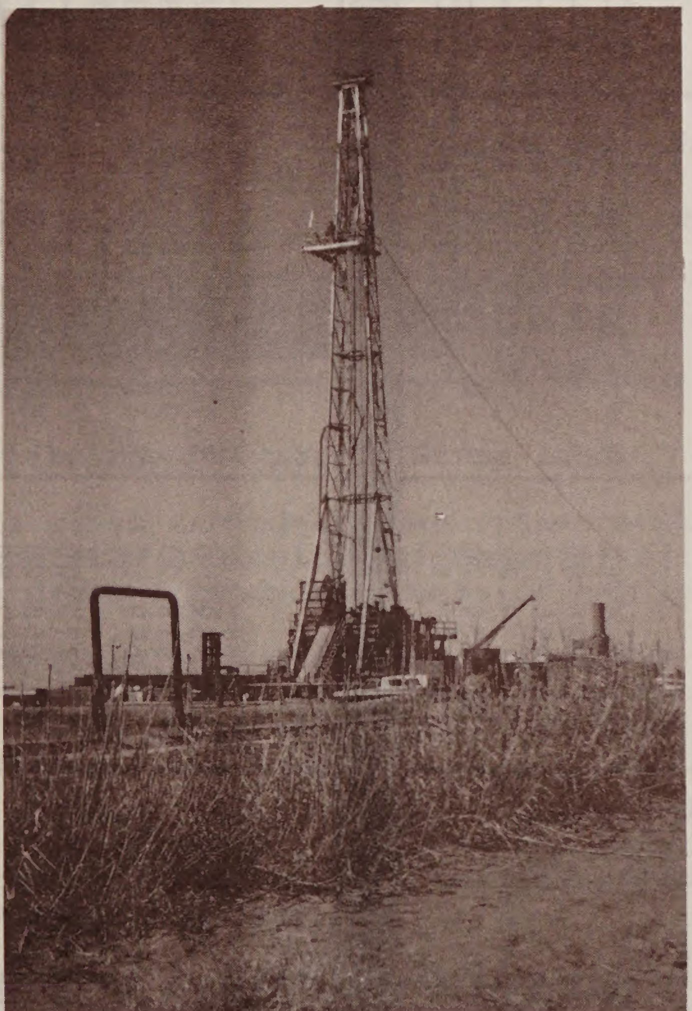
(d) Any operations using motorized vehicles over other than "open use areas and trails" as defined in Subpart 6292 of this Title, "Off-road Vehicles," unless the use of a motorized vehicle can be covered by a temporary use permit issued under Subpart 8372 of this title;

(e) The construction or placing of any mobile, portable, or fixed structure on public land for more than 30 days;

(f) On mining operations requiring the use of explosives; or

(g) Any operation which may cause changes in a water course.

Any expansion of a grandfathered mining activity that falls within the "manner and degree" category of 43 CFR 3802.0(J) is exempt from the filing requirements of these regulations but may still be regulated under 43 CFR 3809 to prevent "undue degradation" of the public lands as specified in 43 CFR 3809.0-5(M).



Geothermal well - Imperial Valley

Beatrice Mine - Old Ivanpah District
(active 1870 - 1890)

If a WSA is enacted to wilderness by Congress, then the mining and exploration provisions of the 1964 Wilderness Act would apply to those areas. All wilderness areas (not WSAs) would be closed to operations allowed under the General Mining Act of 1872 (as amended) at midnight on December 31, 1983. Only valid mining claims located on or before that date would retain mining rights. After that date, no new claims may be located.

If Congress does not enact the WSA into a formal wilderness, it would revert to another multiple-use class (L, M, or I). All operations in these classes will be subject to 43 CFR 3809.

All mineral leasing and sales activity in WSAs will be subject to the BLM's published Interim Management Policy of December 12, 1979 (excerpts of which are printed on the back of Map No. 1, "Interim Plan," in the back cover pocket of this document). All leases would be issued with exploration rights only. Development would be prohibited until Congress acts on the WSA proposal. Material sales sites may be issued subject to meeting the nonimpairment and reclamation suitability criteria.

Table G-1

Mineral Commodities of the CDCA by Economic Group

			U.S. DOMESTIC CONSUMPTION (1978)					
			PERCENT		VALUE OF NET			
COMMODITY	CDCA IN PLACE VALUE (000,000)	CDCA IN PLACE VOLUMES	NET IMPORT	NET EXPORT	IMPORT (000,000)	EXPORT (000,000)	(TO 1985) PROTECTED RATE OF ANNUAL DEMAND	1980 PRODUCTION STATUS IN THE CDCA
Group I								
Copper	599.52	906,870,295 lb	20	---	768.33	---	1.0%	Dormant
Lead	85.74	254,793,165 lb	9	---	271.75	---	2.0%	Dormant
Molybdenum	15,659.80	3,170,000,000 lb	---	52	---	329.59	5.0%	None
Silver	1,318.64	244,141,856 oz	48	---	287.28	---	3.0%	Active
Talc	409.96	5,945,201 st	---	21	---	18.69	4.0%	Active
Thorium	44.96	42,416,000 lb	100	---	0.50	---	1.0%	None
Tin	0.30	48,000 lb	79	---	703.46	---	1.0%	None
Tungsten	1,251.68	9,628,327 stu	56	---	57.75	---	10.0%	Active
Zinc	30.11	97,234,996 lb	66	---	497.07	---	2.0%	Active
Total Group I	19,395.38				2,586.14	348.28	3.2%	
Group II								
Gold	662.48	3,416,071 oz	53	---	907.23	---	3.0%	Active
Strontium	1,045.11	22,680,500 st	100	---	0.93	---	3.0%	None
Total Group II	1,704.79				908.16	0.0	3.0%	
Group III								
Borates	37,996.62	106,822,048 st	---	74	---	45.57	4.0%	Active
Kyanite	236.94	3,761,000 st	---	45	---	19.00	6.0%	None
Lithium	3,956.17	1,939,300 st	---	59	---	60.00	10.0%	Dormant
Rare earths	14,119.29	9,289,010 st	---	0.57	---	0.10	6.0%	Active
Soda Ash	67,569.70	1,107,700,000 st	---	9	---	47.03	2.0%	Active
Uranium	8,517.60	113,400 st	---	37	---	588.00	5.0%	None
Total Group III	132,296.32				0.00	759.70	4.1%	
Group IV								
Geothermal	---	7,494 MWe	---	---	---	---	5.0%	Active
Gypsum	19,439.60	3,120,321,850 st	32	---	51.76	---	3.0%	Active
Iron	440,913.00	200,415,000 lt	29	---	739.20	---	2.0%	Active
Limestone	7,659.80	3,195,600,000 st	3	---	1.83	---	5.0%	Active
Oil & Gas	---	Moderate	45	---	46,932.20	---	5.0%	None
Sand & Gravel	1,170.00	Large	---	0.36	---	8.21	2.0%	Active
Spec. Clay	21,068.08	522,775,000 st	---	5.0	---	103.34	6.0%	Active
Zeolite	4,562.50	29,725,000 st	---	---	---	---	3.0%	Active
Total Group IV	494,812.98				47,724.99	111.55	3.9%	
GRAND TOTAL	648,314.80				51,219.19	1,219.53	3.6%	

Table G-2

Distribution of Mineral Potential by Land-use Category (all figures in 000)

Group		Land Within Multiple Use Classes[a]				Other			
		C	L	M	I	Military	Nat'l Parks	State Parks	Total
LOCATABLES									
[b]Class 1		33.59	159.06	222.41	77.00	0.00	0.77	0.00	492.83
[c]Class 2		235.62	538.23	243.24	34.10	4.92	0.00	0.00	1056.61
[d]Class 3		402.17	775.70	416.66	93.70	0.00	6.45	0.00	1694.68
[e]Class 4		516.44	1509.11	569.21	93.28	365.45	600.05	79.85	3733.39
LEASEABLE									
Sodium	Known	0.00	17.82	9.22	17.82	0.00	145.31	0.00	190.17
	High Potential	199.30	1145.57	996.91	146.07	836.51	758.17	2.15	4084.68
Potassium	Known	0.00	0.00	0.00	25.19	0.00	0.00	0.00	25.19
	Withdrawn	0.00	30.41	3.38	7.83	7.37	0.00	0.00	48.99
Sodium & Potassium	Medium Potential	0.00	15.36	4.30	4.30	0.00	0.00	0.00	19.66
Oil & Gas	Potential	144.54	903.59	1197.59	155.75	880.43	714.55	2.92	3999.32
Geothermal									
KGRA		8.88	15.56	85.71	8.60	71.88	0.00	0.00	190.60
PGRA		179.71	780.13	516.40	79.87	169.88	175.41	121.65	2023.05
Uranium		198.12	455.07	194.33	13.42	------[f]	------	------	860.94
SALEABLE		212.61	899.35	984.26	102.39	------	------	60.87	2259.48

[a] May include private or State land.

[b] This class includes areas interpreted on the basis of known mineral deposits (and their associated geologic environments) of Category I commodities. Also included in this class are present producing mines of any locatable mineral commodity.

[c] This class includes areas containing known mineral deposits with reserves and/or resources of Category II commodities. Also included are areas with known occurrences and, based on geologic, geophysical and/or geochemical data, inferred occurrences of Category I commodities.

[d] This class includes areas interpreted to be favorable for future discovery of locatable mineral deposits. Based on evaluation of geologic, geophysical and/or geochemical data, the interpretation utilizes current geological knowledge and best professional judgement of the investigating team.

[e] This class includes areas for which the potential for locatable mineral resources is interpreted on the basis of preliminary evaluation of geologic, mineral occurrence, and limited field verification data only. No further analysis has been done.

[f] ------, No data collected or analyzed.

Table G-3

Percent of Lands Classified for Mineral Potential by Land Use Category[a] (all figures in percent)

Group		Multiple Use Classes				Other			
		C	L	M	I	Military	Nat'l Parks	State Parks	Total
LOCATABLES									
[b]Class 1		0.13	0.62	0.87	0.30	0.00	0.003	0.00	1.92
[c]Class 2		0.92	2.11	0.95	0.13	0.02	0.00	0.00	4.13
[d]Class 3		1.57	3.03	1.63	0.37	0.00	0.03	0.00	6.63
[e]Class 4		2.02	5.90	2.23	0.36	1.43	2.34	0.31	14.59
LEASEABLE									
Sodium	Known	0.00	0.07	0.04	0.07	0.00	0.57	0.00	0.75
	High Potential	0.78	4.48	3.90	0.57	3.27	2.97	0.01	0.75
Potassium	Known	0.00	0.00	0.00	0.10	0.00	0.00	0.00	0.10
	Withdrawn	0.00	0.12	0.01	0.03	0.03	0.00	0.00	0.08
Sodium & Potassium	Medium Potential	0.00	0.06	0.02	0.00	0.00	0.00	0.00	0.08
Oil & Gas	Potential	0.57	3.53	4.68	0.61	3.44	2.80	0.01	15.64
Geothermal									
KGRA		0.03	0.06	0.34	0.03	0.28	0.00	0.00	0.74
PGRA		0.70	3.05	2.02	0.31	0.66	0.68	0.48	7.90
Uranium		0.78	1.78	0.76	0.05	-----[f]	-----	-----	3.37
SALEABLE		0.83	3.52	3.85	0.40	------	------	0.24	8.84

[a] Figures are percentage of total CDCA area: 25,562,000 acres.

[b] See footnote b on Table G-2.

[c] See footnote c on Table G-2.

[d] See footnote d on Table G-2.

[e] See footnote e on Table G-2.

[f] See footnote f on Table G-2.

Table G-4

Percent of Available Lands
Classified for Mineral Potential
(all figures in percent)

Group		Land Within Multiple Use Classes				Total of Lands Open to Mining[a]	Total Closed to Mineral Operations[b]
		C	L	M	I		
LOCATABLES							
[c]Class 1		0.18	0.85	1.20	0.41	2.64	0.01
[d]Class 2		1.27	2.90	1.31	0.18	5.66	0.07
[e]Class 3		2.16	4.17	2.24	0.50	9.07	0.09
[f]Class 4		2.78	8.11	3.06	0.50	14.45	9.78
LEASEABLE							
Sodium	Known	0.00	0.10	0.05	0.10	0.25	2.09
	High Potential	1.07	6.16	5.36	0.79	13.38	22.96
Potassium	Known	0.00	0.00	0.00	0.14	0.14	0.00
	Withdrawn	0.00	0.16	0.02	0.04	0.24	0.11
Sodium & Potassium	Medium Potential	0.00	0.08	0.02	0.00	0.10	0.00
Oil & Gas	Potential	0.78	4.86	6.44	0.84	12.92	22.97
Geothermal							
KGRA		0.05	0.08	0.46	0.05	0.64	0.01
PGRA		0.97	4.19	2.77	0.43	8.36	6.71
Uranium		1.06	2.45	1.04	0.07	4.62	-----[g]
SALEABLE		1.14	4.83	5.29	0.55	11.81	0.87

[a] 18,607,000 acres available for mineral operations including private lands.

[b] 6,955,000 acres not open to mineral operations.

[c] See footnote b on Table G-2.

[d] See footnote c on Table G-2.

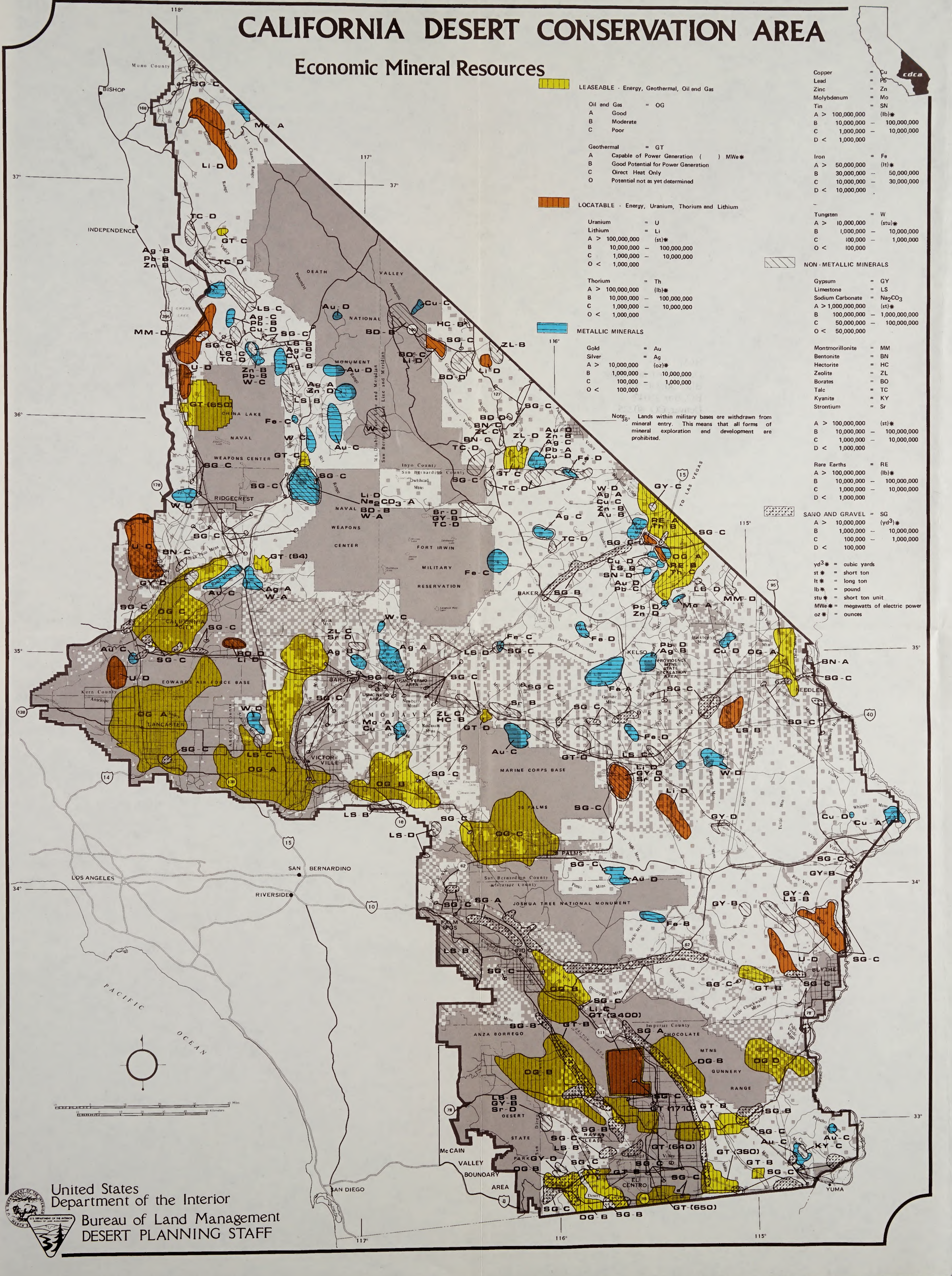
[e] See footnote d on Table G-2.

[f] See footnote e on Table G-2.

[g] See footnote f on Table G-2.

CALIFORNIA DESERT CONSERVATION AREA

Economic Mineral Resources



🟨 LEASEABLE · Energy, Geothermal, Oil end Gas

Oil end Ges = OG
A Good
B Moderate
C Poor

Geothermal = GT
A Capable of Power Generation ( ) MWe✱
B Good Potential for Power Generation
C Oirect Heat Only
O Potentiel not as yet determined

🟧 LOCATABLE · Energy, Uranium, Thorium end Lithium

Uranium = U
Lithium = Li
A > 100,000,000 (st)✱
B 10,000,000 – 100,000,000
C 1,000,000 – 10,000,000
O < 1,000,000

Thorium = Th
A > 100,000,000 (lb)✱
B 10,000,000 – 100,000,000
C 1,000,000 – 10,000,000
O < 1,000,000

🟦 METALLIC MINERALS

Gold = Au
Silver = Ag
A > 10,000,000 (oz)✱
B 1,000,000 – 10,000,000
C 100,000 – 1,000,000
O < 100,000

Note: Lands within military bases ere withdrawn from mineral entry. This means that all forms of mineral exploration end development ere prohibited.

Copper = Cu
Lead = Pb
Zinc = Zn
Molybdenum = Mo
Tin = SN
A > 100,000,000 (lb)✱
B 10,000,000 – 100,000,000
C 1,000,000 – 10,000,000
D < 1,000,000

Iron = Fe
A > 50,000,000 (lt)✱
B 30,000,000 – 50,000,000
C 10,000,000 – 30,000,000
D < 10,000,000

Tungsten = W
A > 10,000,000 (stu)✱
B 1,000,000 – 10,000,000
C 100,000 – 1,000,000
O < 100,000

▨ NON · METALLIC MINERALS

Gypsum = GY
Limestone = LS
Sodium Carbonate = Na_2CO_3
A > 1,000,000,000 (st)✱
B 100,000,000 – 1,000,000,000
C 50,000,000 – 100,000,000
O < 50,000,000

Montmorillonite = MM
Bentonite = BN
Hectorite = HC
Zeolite = ZL
Borates = BO
Talc = TC
Kyanite = KY
Strontium = Sr

A > 100,000,000 (st)✱
B 10,000,000 – 100,000,000
C 1,000,000 – 10,000,000
D < 1,000,000

Rere Eerths = RE
A > 100,000,000 (lb)✱
B 10,000,000 – 100,000,000
C 1,000,000 – 10,000,000
D < 1,000,000

▨ SANO AND GRAVEL = SG
A > 10,000,000 (yd^3)✱
B 1,000,000 – 10,000,000
C 100,000 – 1,000,000
D < 100,000

yd^3✱ = cubic yards
st ✱ = short ton
lt ✱ = long ton
lb ✱ = pound
stu ✱ = short ton unit
MWe ✱ = megawatts of electric power
oz ✱ = ounces

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INDEPENDENCE
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CALIFORNIA CITY
LANCASTER
BARSTOW
VICTORVILLE
BAKER
KELSO
NEEDLES
SAN BERNARDINO
LOS ANGELES
RIVERSIDE
PALM SPGS
29 PALMS
BLYTHE
EL CENTRO
YUMA
SAN DIEGO
DEATH VALLEY NATIONAL MONUMENT
CHINA LAKE NAVAL WEAPONS CENTER
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EDWARDS AIR FORCE BASE
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JOSHUA TREE NATIONAL MONUMENT
CHOCOLATE MTNS GUNNERY RANGE
ANZA BORREGO DESERT STATE PARK
McCAIN VALLEY BOUNDARY AREA
PROVIDENCE MTNS STATE RECREATION AREA
MOJAVE DESERT
Inyo County
San Bernardino County
Kern County
Riverside County
Imperial County
TO LAS VEGAS
PACIFIC OCEAN
OWENS LAKE
Mt. Diablo Base Line and Meridian
San Bernardino Base Line and Meridian
SG-C
Mo-A
Li-D
TC-D
GT-C
Ag-B
Pb-B
Zn-B
LS-C
Ag-C
Pb-B
Cu-D
MM-D
U-D
GT (650)
Au-D
Cu-C
HC-B
BD-B
ZL-B
BO-C
Li-D
Fe-C
W-C
Au-C
GT-C
Li-D
Na_2CO_3-A
BD-B
W-A
Sr-D
GY-B
TC-D
GT-(64)
BN-C
GY-D
Ag-A
W-A
OG-C
Au-C
U-D
OG-A
W-D
ZL-C
Sr-D
HC-B
Mo-A
Cu-A
GT-D
OG-B
Au-C
GY-C
RE-A
Th-B
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RE-B
Th-C
MM-D
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Cu-D
LS-B
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Pb-C
Fe-D
Fe-A
Sr-B
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Li-C
GY-D
Sr-D
Au-D
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Cu-D
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U-D
GT-B
Li-C
GT (3400)
OG-B
OG-D
GT (1710)
GT (640)
GT (360)
GT (650)
Au-C
KY-C
LS-B
GY-B
Sr-D
SG-A
SG-B
SG-B NAVAL LEASE
DG-B

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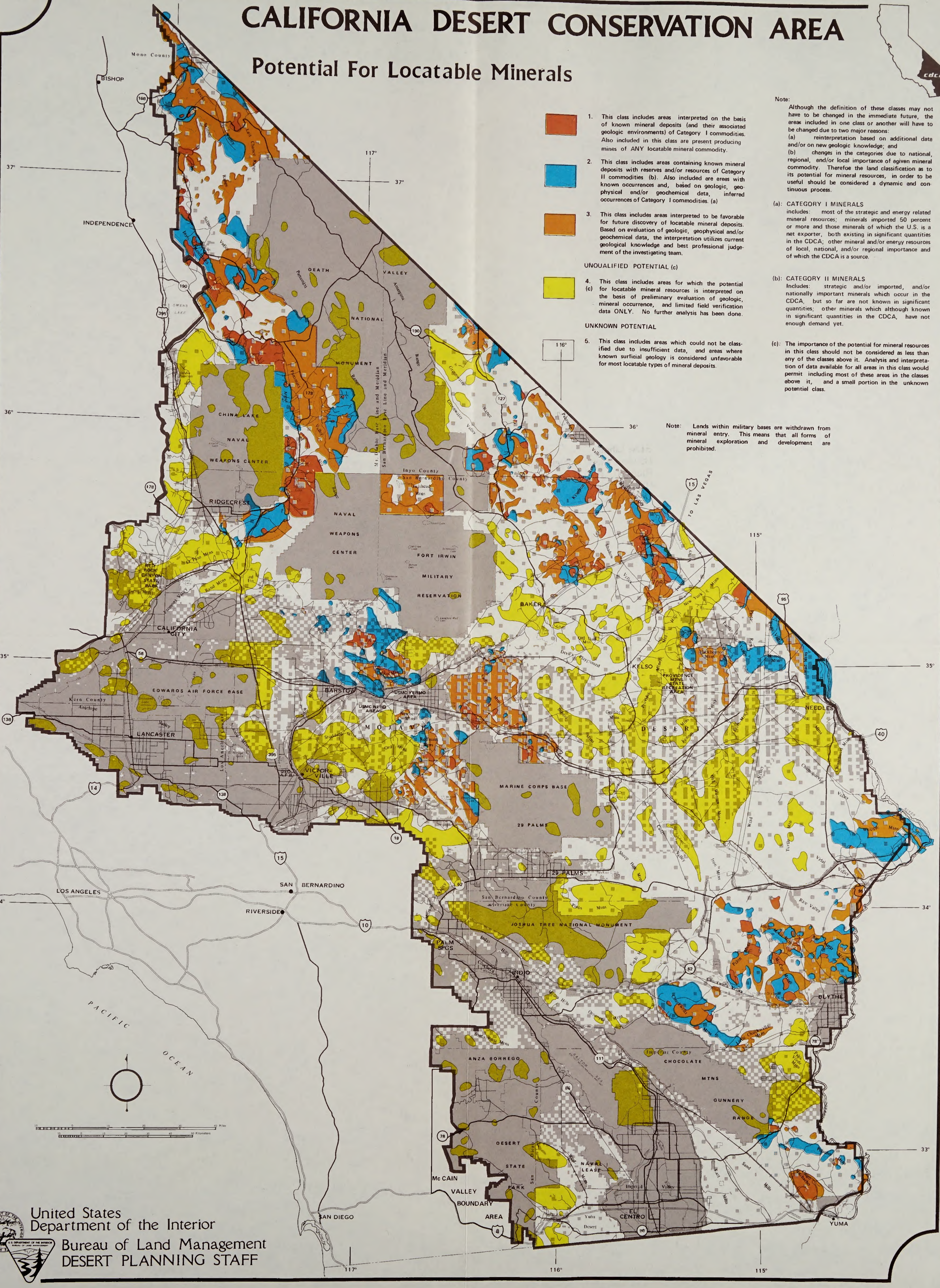
CALIFORNIA DESERT CONSERVATION AREA

Potential For Locatable Minerals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LANCASTER
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USMC YERMO AREA
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Imperial Valley
EL CENTRO
YUMA
SAN DIEGO
Mc CAIN VALLEY BOUNDARY AREA
PACIFIC OCEAN

🟥 1. This class includes areas interpreted on the basis of known mineral deposits (and their associated geologic environments) of Category I commodities. Also included in this class are present producing mines of ANY locatable mineral commodity.

🟦 2. This class includes areas containing known mineral deposits with reserves and/or resources of Category II commodities (b). Also included are areas with known occurrences and, based on geologic, geophysical and/or geochemical data, inferred occurrences of Category I commodities. (a)

🟧 3. This class includes areas interpreted to be favorable for future discovery of locatable mineral deposits. Based on evaluation of geologic, geophysical and/or geochemical data, the interpretation utilizes current geological knowledge and best professional judgement of the investigating team.

UNQUALIFIED POTENTIAL (c)

🟨 4. (c) This class includes areas for which the potential for locatable mineral resources is interpreted on the basis of preliminary evaluation of geologic, mineral occurrence, and limited field verification data ONLY. No further analysis has been done.

UNKNOWN POTENTIAL

☐ 5. This class includes areas which could not be classified due to insufficient data, and areas where known surficial geology is considered unfavorable for most locatable types of mineral deposits.

Note:

Although the definition of these classes may not have to be changed in the immediate future, the areas included in one class or another will have to be changed due to two major reasons:

(a) reinterpretation based on additional data and/or on new geologic knowledge; and

(b) changes in the categories due to national, regional, and/or local importance of agiven mineral commodity. Therefoe the land classification as to its potential for mineral resources, in order to be useful should be considered a dynamic and continuous process.

(a): CATEGORY I MINERALS

includes: most of the strategic and energy related mineral resources; minerals imported 50 percent or more and those minerals of which the U.S. is a net exporter, both existing in significant quantities in the CDCA; other mineral and/or energy resources of local, national, and/or regional importance and of which the CDCA is a source.

(b): CATEGORY II MINERALS

Includes: strategic and/or imported, and/or nationally important minerals which occur in the CDCA, but so far are not known in significant quantities; other minerals which although known in significant quantities in the CDCA, have not enough demand yet.

(c): The importance of the potential for mineral resources in this class should not be considered as less than any of the classes above it. Analysis and interpretation of data available for all areas in this class would permit including most of these areas in the classes above it, and a small portion in the unknown potential class.

Note: Lands within military bases are withdrawn from mineral entry. This means that all forms of mineral exploration and development are prohibited.

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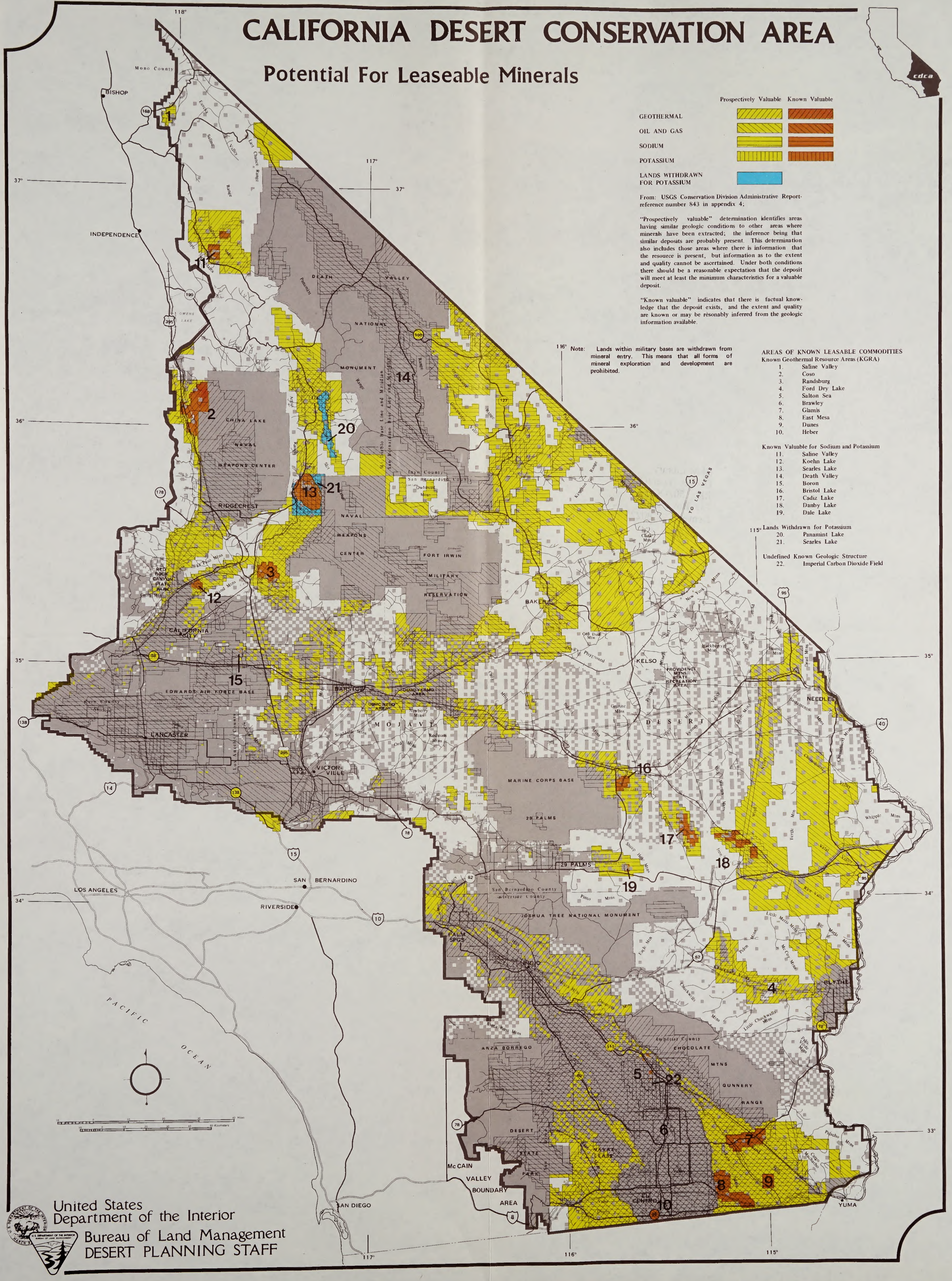
CALIFORNIA DESERT CONSERVATION AREA

Potential For Leaseable Minerals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	Prospectively Valuable	Known Valuable
GEOTHERMAL	▨	▨
OIL AND GAS	▨	▨
SODIUM	▤	▤
POTASSIUM	▥	▥
LANDS WITHDRAWN FOR POTASSIUM	🟦	

From: USGS Conservation Division Administrative Report-reference number 843 in appendix 4;

"Prospectively valuable" determination identifies areas having similar geologic conditions to other areas where minerals have been extracted; the inference being that similar deposits are probably present. This determination also includes those areas where there is information that the resource is present, but information as to the extent and quality cannot be ascertained. Under both conditions there should be a reasonable expectation that the deposit will meet at least the minimum characteristics for a valuable deposit.

"Known valuable" indicates that there is factual knowledge that the deposit exists, and the extent and quality are known or may be resonably inferred from the geologic information available.

Note: Lands within military bases are withdrawn from mineral entry. This means that all forms of mineral exploration and development are prohibited.

AREAS OF KNOWN LEASABLE COMMODITIES

Known Geothermal Resource Areas (KGRA)

1.	Saline Valley
2.	Coso
3.	Randsburg
4.	Ford Dry Lake
5.	Salton Sea
6.	Brawley
7.	Glamis
8.	East Mesa
9.	Dunes
10.	Heber

Known Valuable for Sodium and Potassium

11.	Saline Valley
12.	Koehn Lake
13.	Searles Lake
14.	Death Valley
15.	Boron
16.	Bristol Lake
17.	Cadiz Lake
18.	Danby Lake
19.	Dale Lake

Lands Withdrawn for Potassium

20.	Panamint Lake
21.	Searles Lake

Undefined Known Geologic Structure

22.	Imperial Carbon Dioxide Field

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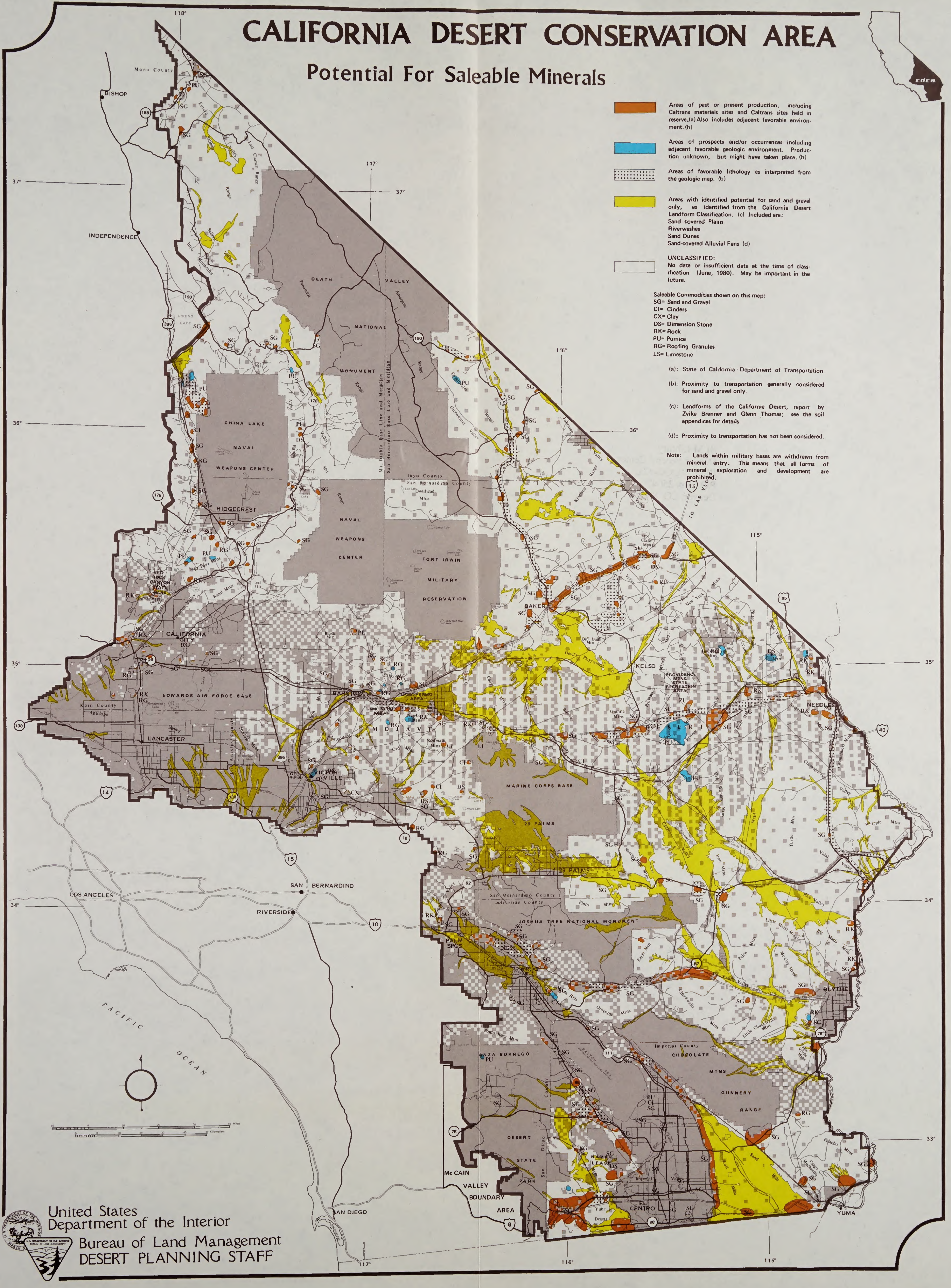
CALIFORNIA DESERT CONSERVATION AREA

Potential For Saleable Minerals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USMC RESERVE AREA
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RIVERSIDE
PALM SPGS
JOSHUA TREE NATIONAL MONUMENT
Riverside County
BLYTHE
ANZA BORREGO DESERT STATE PARK
Imperial County
CHOCOLATE MTNS GUNNERY RANGE
EL CENTRO
YUMA
SAN DIEGO
McCAIN VALLEY BOUNDARY AREA
PACIFIC OCEAN
TO LAS VEGAS
118°
117°
116°
115°
37°
36°
35°
34°
33°
Miles
Kilometers

🟧 Areas of past or present production, including Caltrans materials sites and Caltrans sites held in reserve.(a) Also includes adjacent favorable environment. (b)

🟦 Areas of prospects and/or occurrences including adjacent favorable geologic environment. Production unknown, but might have taken place. (b)

▨ Areas of favorable lithology as interpreted from the geologic map. (b)

🟨 Areas with identified potential for sand and gravel only, as identified from the California Desert Landform Classification. (c) Included are:
Sand-covered Plains
Riverwashes
Sand Dunes
Sand-covered Alluvial Fans (d)

☐ UNCLASSIFIED:
No data or insufficient data at the time of classification (June, 1980). May be important in the future.

Saleable Commodities shown on this map:
SG= Sand and Gravel
CI= Cinders
CX= Clay
DS= Dimension Stone
RK= Rock
PU= Pumice
RG= Roofing Granules
LS= Limestone

(a): State of California - Department of Transportation

(b): Proximity to transportation generally considered for sand and gravel only.

(c): Landforms of the California Desert, report by Zvika Brenner and Glenn Thomas; see the soil appendices for details

(d): Proximity to transportation has not been considered.

Note: Lands within military bases are withdrawn from mineral entry. This means that all forms of mineral exploration and development are prohibited.

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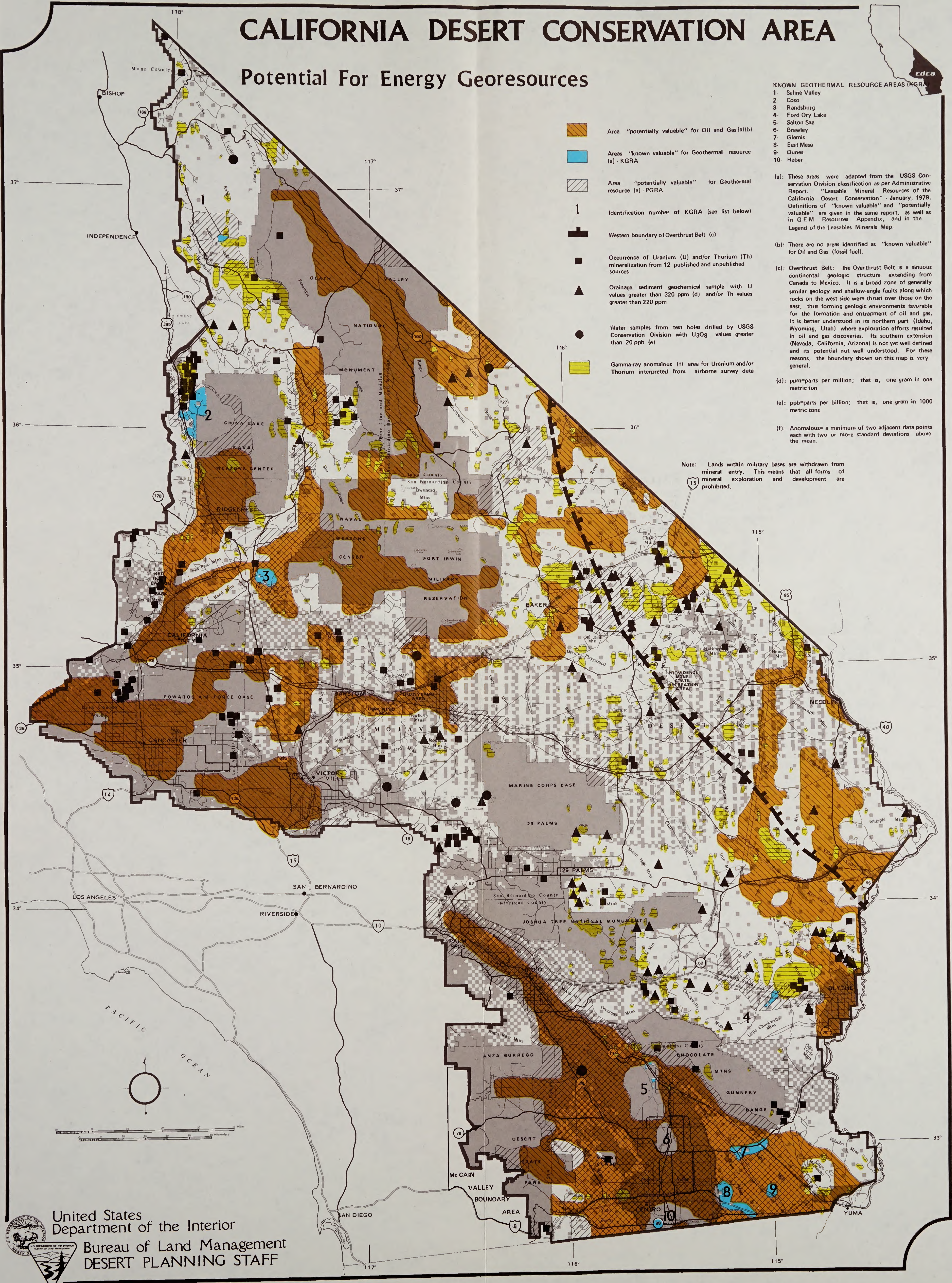
CALIFORNIA DESERT CONSERVATION AREA

Potential For Energy Georesources


cdca
118°
Mono County
BISHOP
168
37°
117°
1
INDEPENDENCE
190
395
OWENS LAKE
DEATH VALLEY NATIONAL MONUMENT
2
CHINA LAKE NAVAL WEAPONS CENTER
36°
116°
127
178
RIDGECREST
NAVAL WEAPONS CENTER
Inyo County
San Bernardino County
FORT IRWIN MILITARY RESERVATION
3
BAKER
15
CALIFORNIA CITY
58
35°
115°
KELSO
PROVIDENCE MTNS STATE RECREATION AREA
95
EDWARDS AIR FORCE BASE
BARSTOW
MOJAVE DESERT
NEEDLES
40
138
LANCASTER
14
VICTORVILLE
18
MARINE CORPS BASE
29 PALMS
SAN BERNARDINO
LOS ANGELES
RIVERSIDE
10
34°
62
San Bernardino County
Riverside County
JOSHUA TREE NATIONAL MONUMENT
PALM SPRINGS
INDIO
82
4
BLYTHE
PACIFIC OCEAN
ANZA BORREGO DESERT STATE PARK
CHOCOLATE MTNS
GUNNERY RANGE
5
6
7
8
9
10
78
33°
Mc CAIN VALLEY BOUNOARY AREA
SAN DIEGO
8
EL CENTRO
98
YUMA
Miles
Kilometers
116°
115°
117°

▨ Area "potentially valuable" for Oil and Gas (a)(b)

🟦 Areas "known valuable" for Geothermal resource (a) · KGRA

▨ Area "potentially valuable" for Geothermal resource (a) · PGRA

1 Identification number of KGRA (see list below)

▬ Western boundary of Overthrust Belt (c)

■ Occurrence of Uranium (U) and/or Thorium (Th) mineralization from 12 published and unpublished sources

▲ Orainage sediment geochemical sample with U values greater than 320 ppm (d) and/or Th values greater than 220 ppm

● Water samples from test holes drilled by USGS Conservation Oivision with U_3O_8 values greater than 20 ppb (e)

🟨 Gamma-ray anomalous (f) area for Uranium and/or Thorium interpreted from airborne survey data

KNOWN GEOTHERMAL RESOURCE AREAS (KGRA)

1- Saline Valley
2- Coso
3- Randsburg
4- Ford Ory Lake
5- Salton Saa
6- Brawley
7- Glamis
8- East Mesa
9- Dunes
10- Heber

(a): These areas were adapted from the USGS Conservation Division classification as per Administrative Report. "Leasable Mineral Resources of the California Oesert Conservation" - January, 1979. Definitions of "known valuable" and "potentially valuable" are given in the same report, as well as in G-E-M Resources Appendix, and in the Legend of the Leasables Minerals Map.

(b): There are no areas identified as "known valuable" for Oil and Gas (fossil fuel).

(c): Overthrust Belt: the Overthrust Belt is a sinuous continental geologic structure extending from Canada to Mexico. It is a broad zone of generally similar geology and shallow-angle faults along which rocks on the west side were thrust over those on the east, thus forming geologic environments favorable for the formation and entrapment of oil and gas. It is better understood in its northern part (Idaho, Wyoming, Utah) where exploration efforts resulted in oil and gas discoveries. Its southern extension (Nevada, California, Arizona) is not yet well defined and its potential not well understood. For these reasons, the boundary shown on this map is very general.

(d): ppm=parts per million; that is, one gram in one metric ton

(e): ppb=parts per billion; that is, one gram in 1000 metric tons

(f): Anomalous= a minimum of two adjacent data points each with two or more standard deviations above the mean.

Note: Lands within military bases are withdrawn from mineral entry. This means that all forms of mineral exploration and development are prohibited.

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K. Energy Production and Utility Corridors Element

FINDING

The passage of the 1972 coastal intiative, adoption of air quality standards, and regulatory policy severely limiting the siting of nuclear power plants in seismically active or heavily populated areas have encouraged utilities to look to the Desert and places east of California as a major siting area for energy production and utility corridors. The potential exists for significant environmental, social, and cultural impacts in order to provide California consumers the benefits of reliable and economical utility services.

ELEMENT OUTLINE

1. GOALS
2. ACTIONS PROPOSED
   - a. Decision Criteria
   - b. Element Components
     - 1) Planning Corridors
     - 2) Contingent Corridors
     - 3) Microwave Towers
     - 4) Power Plant Sites
     - 5) Alternative Energy Sources
3. IMPLEMENTATION
   - a. Basic Tasks
   - b. Limitations During Interim Management

1. GOALS

a. To establish a network of joint-use planning corridors capable of meeting projected power needs to the year 2000.

b. To identify and establish future communication site locations and methods for considering future power plant sites.

c. To identify locations for potential geothermal and wind power facilities.

2. ACTIONS PROPOSED

a. Decision Criteria

The principal criteria adopted are a combination of demand forecasts made by the California Energy Commission and input from the Joint Utility Advisory Committee. This committee is comprised of utility companies and governmental agencies who have existing utility rights-of-way in the California Desert. Specific electrical and natural gas right-of-way or power plant site applications made under the provisions of this element will be consistent with adopted California Energy Commission forecasts, which are reviewed biennially. The decision criteria are:

1) Minimize the number of separate rights-of-way by utilizing existing rights-of-way as a base for planning corridors;

2) Encourage joint use of corridors by transmission lines, canals, pipelines and cables;

3) Avoid sensitive resources wherever possible;

4) Conform to local plans whenever possible;

5) Consider wilderness values and be consistent with final wilderness recommendations;

6) Complete the delivery systems network;

7) Consider ongoing projects for which decisions have been made; for example, the Intermountain Power Project; and

8) Consider corridor networks which consider power needs and alternative fuel resources.

b. Element Components

1) PLANNING CORRIDORS

Sixteen planning corridors have been identified; these are shown on Map No. 21, "Energy Production and Utility Corridors," which follows the text of this element. Table E-1, opposite the map, describes the width of each corridor and existing facilities within it.

Planning corridors are a tool for guiding the necessary detailed planning and environmental assessment work that would continue to be required when a right-of-way is requested. The establishment of a planning corridor is not an automatic grant of a new right-of-way. Utility needs which do not conform to the adopted corridor system would be processed by means of a plan amendment in conjunction with necessary permit hearings required by other agencies. The scope of the Desert Plan allows the designation of corridors which address the following types of utility facilities:

a.) New electrical transmission towers and cables of 161 kV (kilovolt) or above;

b.) All pipelines with diameters greater than 12";

c.) Coaxial cable for interstate communications; and

d.) Major aqueducts or canals for inter-basin transfers of water.

The joint-use planning corridors vary in width from two to five miles. (These two distance standards describe the width of the planning corridor). There is an acceptable two-mile standard for separation of existing facilities. A two-mile width generally provides sufficient flexibility in selecting alternative routes for a right-of-way. Also, a two-mile width generally provides sufficient space for evaluating a number of possible alternate routes.

The five-mile standard is selected where there is no existing facility, and, therefore, little or no engineering and environmental data to define a narrower corridor alignment. It is also selected in those cases where so many facilities exist or corridors merge that a five-mile width is needed to ensure sufficient space for system integrity and flexibility.

The planning corridors across public lands are shown as a solid line on Map No. 21. Where private, State or Native American land ownership predominates, the corridors are depicted as dashed lines. In these locations right-of-way alignments will be a joint responsibility of Federal, State, local, or Native American organizations.

The predominant orientation of proposed utility corridors is east-west, with a number of entry points to the Desert along the Nevada-Arizona border and a number of exit points into the Los Angeles Basin or the San Joaquin Valley. A combination of topography, military bases, Native American concerns, wildlife management areas, National Monuments, and city boundaries limit the number of new entry and exit points for utility corridors.

It should be noted that the utility planning corridors specifically address the expansion of utility facilities constructed for the purpose of telecommunications and bulk transfers of electricity, gas, water, petroleum, and other commodities. "Expansion" is defined in this element as the addition, construction, or major modification of a tower, pipe, canal, or cable to accommodate the transfer of additional products. Expansion does not include some types of minor facility changes which increase the utilization of existing rights-of-way or which reduce the overall impact of the facilities on an existing right-of-way.

Approximately 5,000 Mw of southern California's electrical energy crosses the Desert. An estimate provided by the Joint Utility Advisory Committee indicates that by the year 2000 a total of 20,000 Mw could be transferred in bulk from within or across the California Desert. Such factors as restrictions on coastal construction and air quality issues in the Los Angeles basin area account for this dramatic increase.

This 20,000 Mw figure cannot easily be used to project facility siting because virtually nothing is known of the final location of power sources or the method of transfer has not been finally determined. Power may be produced in the CDCA or in Nevada, Utah, Arizona or New Mexico; come from geothermal, wind or conventional technology; and be transferred by 230 kV, 500 kV, or 765 kV lines. It may be on single or double circuits, and be alternating current or direct current.

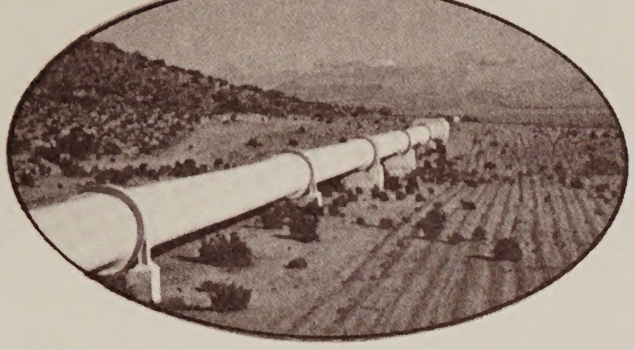
2) CONTINGENT CORRIDORS

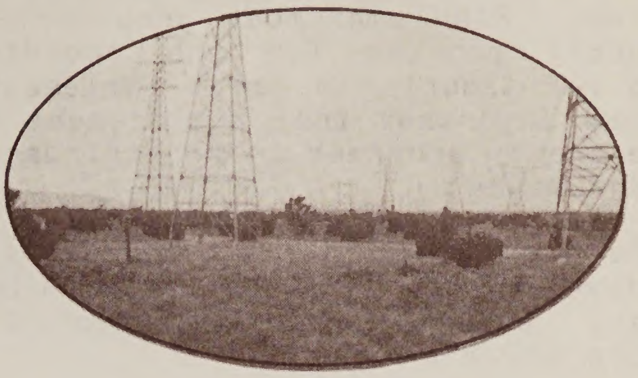
The draft plan alternatives identified a maximum of 28 planning corridors which were shown on the Use Alternative (see Draft Plan, p. 103). The draft Protection Alternative recommended 15 corridors. In December, 1979 the Secretary of Interior Cecil Andrus designated an additional corridor, Corridor BB, along Interstate 15 for the Intermountain Power Project. Nine more corridors (P, Q, R, S, T, AA, W, Y, Z) have been identified as having some potential for use in the future should project status associated with the proposed 16 corridors change. These nine are referred to as "contingent corridors" and are mapped in Appendix XV.

Contingent corridors may be brought forward into the Plan after successfully completing the Plan amendment process. A contingent corridor, however, will not become a planning corridor unless the identified project has succcessfully been processed through the complete State and Federal regulatory and environmental review process.

A Plan amendment is not required in order to study a possible utility alignment within a contingent corridor. If the contingent corridor is found undesirable with respect to a particular project, it would remain in "contingent" status.

However, a Plan amendment would be required if a particular contingent utility corridor is found to be a more desirable route than the corridors in the Plan. Additionally, prior to commencement of such a study the project sponsors will notify the State Director of their intention to conduct an environmental review process for the purpose of analyzing a right-of-way within a contingent corridor.





3) MICROWAVE TOWERS

Six microwave tower sites are depicted on the "Energy Production and Utility Corridors" map. This element intends not only to accommodate the immediate site of the tower but also to provide space for associated infrastructure such as access roads. The construction of new towers is permitted in Multiple-use Classes L, M, and I.

4) POWER PLANT SITES

The location of the two power plant sites which have been "certified" by the California Energy Commission are also shown on the element map following this narrative. A typical power plant occupies approximately 2500-3000 acres. The Joint Utilities Advisory Committee estimates that five to ten conventional power plants serving California power needs could be built in the CDCA or outside the State during the next twenty years. Proposed power plant sites in the CDCA will be subject to complete State and Federal regulatory and environmental review. A plan amendment would be required for fossil fuel and nuclear power plants proposed in a Class L area.

All power plant siting over 50 Mw in California falls primarily under the jurisdiction of the State of California Energy Commission. As proposals for electrical plants evolve, the State would take lead responsibility in determining need and consistency with the Commission's forecasts before any State permit to build is issued. The Bureau of Land Management will focus on the same factors affecting the public lands and their resources used by the Energy Commission. They are:

a) Consistency with the Desert Plan, including designated and proposed planning corridors;

b) Protection of Air Quality;

c) Impact on Adjacent Wilderness and Sensitive Resources;

d) Visual Quality;

e) Fuel Sources and Delivery Systems;

f) Cooling Water Source(s);

g) Waste Disposal;

h) Seismic Hazards; and

i) Regional Equity

5) ALTERNATIVE ENERGY SOURCES

The Energy Production and Utilities Element has recognized the power source technologies being developed in the next twenty years and provides sufficient utility corridors to accommodate expected development in these fields.

The prime areas for geothermal energy are in Imperial County, with an estimated generating capacity of 6800 megawatts (USGS Circular 790), and Coso, estimated at 725 megawatts. Other regions of the Desert have been classified as noncompetitive geothermal interest areas. These sites of exploratory drilling are managed within the context of the multiple-use class guidelines and are depicted on Map No. 18, "Potential for Leasable Minerals,) in the G-E-M Element. New data on these sites may result in their redesignation as a KGRA or a geothermal site by USGS, perhaps warranting a Plan amendment. A 50 megawatt geothermal plant uses about 110 acres in the best geothermal areas.

California has established long-term goals for solar and wind energy. The statewide programs are described in the California Energy Commission's Final Environmental Impact Report, identified as State Clearinghouse Document No. 78111406, May 1980. The involvement expected to be required by lands in the CDCA is described in the California Energy Commission's 1979 Biennial Report, and by comments made by the Commission regarding BLM's Draft Desert Plan and EIS.

In coordination with other agencies, a comprehensive wind energy data acquisition program will be developed for the CDCA. Extensive meterological studies will be required, to be funded and carried out by agencies other than BLM. A few major sites are already known, portions of which are well enough investigated to begin environmental consideration of siting proposals in the near future. Other areas of apparent commercial potential will require detailed feasibility studies before site-specific plans can be prepared. Plan amendment procedures will adequately provide for the coordination needed for assuring a rapid implementation of these important fuel replacement alternative energy programs in an environmentally sound manner.

Further discussion on energy sources and development will be found in the Geology, Energy, and Minerals Element (Section III.J).

3. IMPLEMENTATION

a. Basic Tasks

This element is intended to serve as a guide for future decision making. Tasks and roles for the future include:

1) Applicants for utility rights-of-way will be encouraged by BLM management to use designated corridors. Compliance with the Plan should speed the BLM approval process and all impact reviews. Managers will first look to contingent corridors for possible solution to requests for developing rights-of-way outside of designated corridors;

2) Sites associated with power generation or transmission not identified in the Plan will be considered through the Plan amendment process;

3) Amendments to this element will generally follow the process contained in the Plan Amendment Section. Future projects requiring Plan amendments will be coordinated with local government, the Public Utilities Commission, the California Energy Commission, and affected utility companies in accordance with NEPA and CEQ Regulations; and

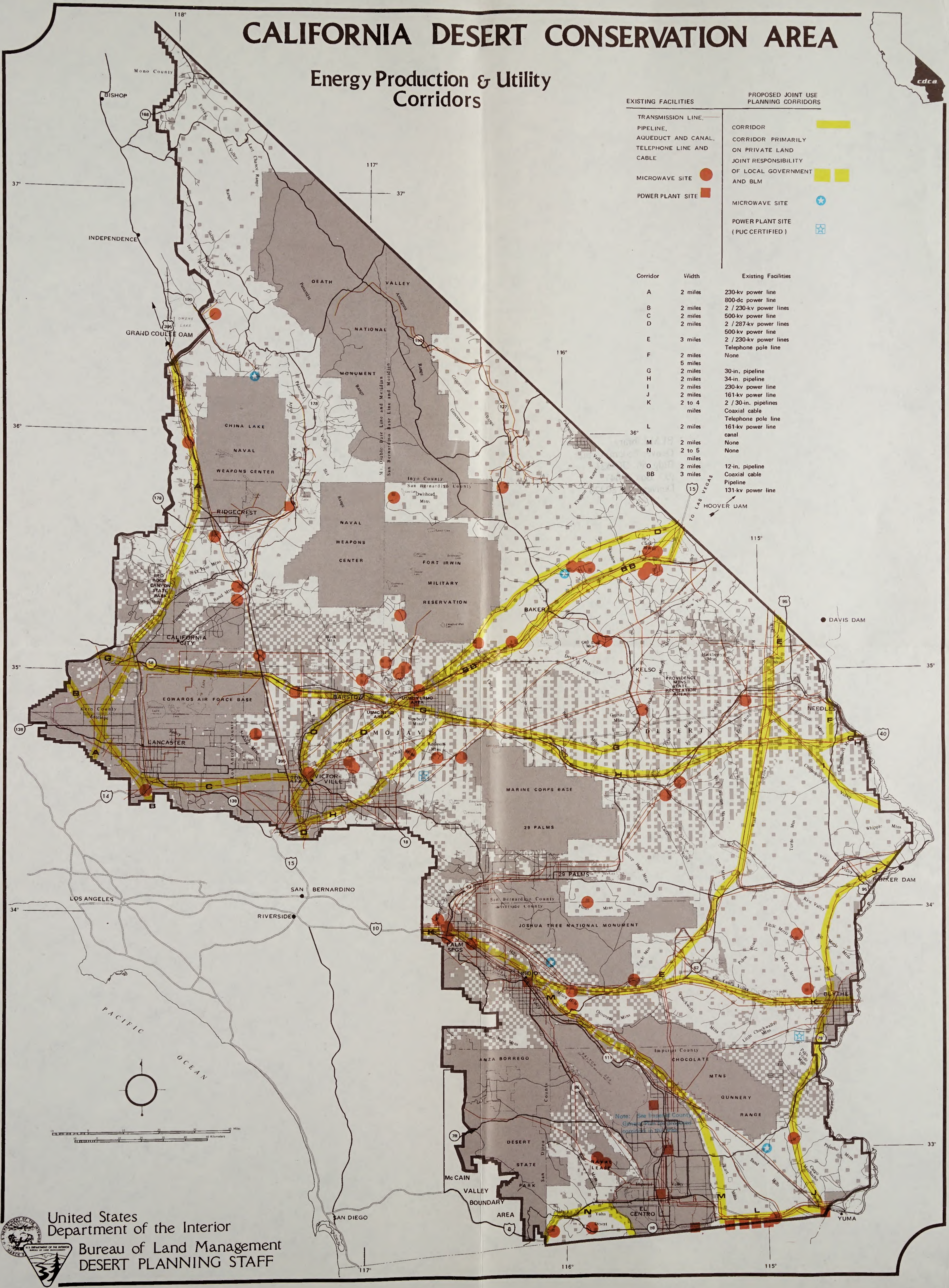
4) BLM will continually coordinate with agencies of State and local government.

b. Limitations During Interim Management

Full implementation of this element is not possible as long as Wilderness Study Areas (WSA) remain in the CDCA. The boundaries of many Wilderness Study Areas are next to rights-of-way boundaries. To establish planning corridors, Congress must act on wilderness boundaries and release the Public land found nonsuitable for wilderness designation.

CALIFORNIA DESERT CONSERVATION AREA

Energy Production & Utility Corridors


cdca
EXISTING FACILITIES
TRANSMISSION LINE,
PIPELINE,
AQUEDUCT AND CANAL,
TELEPHONE LINE AND
CABLE
MICROWAVE SITE ●
POWER PLANT SITE ■
PROPOSED JOINT USE PLANNING CORRIDORS
CORRIDOR
CORRIDOR PRIMARILY ON PRIVATE LAND JOINT RESPONSIBILITY OF LOCAL GOVERNMENT AND BLM
MICROWAVE SITE
POWER PLANT SITE (PUC CERTIFIED)
118°
117°
116°
115°
37°
36°
35°
34°
33°
Mono County
BISHOP
INDEPENDENCE
GRAND COULEE DAM
Owens Lake
DEATH VALLEY NATIONAL MONUMENT
CHINA LAKE NAVAL WEAPONS CENTER
RIDGECREST
NAVAL WEAPONS CENTER
FORT IRWIN MILITARY RESERVATION
Inyo County
San Bernardino County
RED ROCK CANYON STATE PARK
CALIFORNIA CITY
EDWARDS AIR FORCE BASE
Kern County
LANCASTER
BARSTOW
USMC YERMO AREA
USMC NEBO AREA
MOJAVE DESERT
VICTORVILLE
BAKER
KELSO
PROVIDENCE MTNS STATE RECREATION AREA
NEEDLES
DAVIS DAM
MARINE CORPS BASE 29 PALMS
29 PALMS
JOSHUA TREE NATIONAL MONUMENT
PALM SPGS
INDIO
BLYTHE
PARKER DAM
ANZA BORREGO DESERT STATE PARK
Imperial County
CHOCOLATE MTNS GUNNERY RANGE
Note: See Imperial County General Plan for proposed corridors in this area.
McCAIN VALLEY BOUNDARY AREA
EL CENTRO
YUMA
LOS ANGELES
SAN BERNARDINO
RIVERSIDE
SAN DIEGO
PACIFIC OCEAN
TO LAS VEGAS
HOOVER DAM
A
B
C
D
E
F
G
H
I
J
K
L
M
N
O
BB

Corridor	Width	Existing Facilities
A	2 miles	230-kv power line 800-dc power line
B	2 miles	2 / 230-kv power lines
C	2 miles	500-kv power line
D	2 miles	2 / 287-kv power lines 500-kv power line
E	3 miles	2 / 230-kv power lines Telephone pole line
F	2 miles 5 miles	None
G	2 miles	30-in. pipeline
H	2 miles	34-in. pipeline
I	2 miles	230-kv power line
J	2 miles	161-kv power line
K	2 to 4 miles	2 / 30-in. pipelines Coaxial cable Telephone pole line
L	2 miles	161-kv power line canal
M	2 miles	None
N	2 to 5 miles	None
O	2 miles	12-in. pipeline
BB	3 miles	Coexial cable Pipeline 131-kv power line

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release the Public land found nonsuitable for wilderness designation.

L. Land Tenure Adjustment Element

FINDING

Intermingled land ownership patterns in much of the CDCA make management difficult for BLM, other Federal, State and local agencies, Indian reservations and private landowners. Selected land exchange with private owners, the State of California, and other non-Federal government agencies, and boundary adjustments with other Federal agencies will be required to improve the opportunities for use or protection of all lands in the Desert, and for effective management of public lands administered by the Bureau of Land Management.

ELEMENT OUTLINE

1. GOALS
2. ACTIONS PROPOSED
   - a. State of California
   - b. Southern Pacific Land Company
   - c. Needs of Desert Communities
   - d. Boundary Adjustments with Other Agencies
   - e. Management of Unclassified Land in the CDCA
3. IMPLEMENTATION

1. GOALS

The Land Tenure Adjustment Element is designed to direct the acquisition and disposal of public lands to maximize the efficiency and consistency of public land management. Such actions will be taken in accordance with the Federal Land Policy and Management Act, and other applicable Federal laws and regulations. Specific programs of land tenure adjustment will incorporate a broad spectrum of lands including State land grants, railroad lands, small tract inholdings and other properties. The objectives for implementation of the Land Tenure Adjustment program in the California Desert are to:

a. Establish a program that complements the objectives of other Desert Plan Elements by providing a land tenure program consistent with resource management objectives, including adjustments of the CDCA boundary for more efficient BLM land management, as described in the Plan Amendment Process portion of the Implementation Section of this Plan;

b. Establish a program for land conveyance that will provide for stable and beneficial patterns of public and private land use;

c. Acquire lands which are needed to provide for effective BLM management of existing public lands and resources in the California Desert; and

d. Cooperate with other public agencies at all levels of government in the management of adjacent and interspersed public and private lands.

2. ACTIONS PROPOSED

Land exchanges, acquisitions, and disposals, are necessary for effective and efficient land management in the CDCA. Private or State-owned parcels within areas designated in the Plan as sensitive or unique will require acquisition through exchange or purchase, unless the management of those resources is assured by another appropriate agency or entity. Additionally, BLM-managed land mixed in with mostly private land is difficult to manage due to access problems, lack of identified boundaries and cost efficiency. These isolated and scattered parcels (where they do not contain legally protected species of plants or animals and cultural artifacts or affect Native American cultural values) will eventually be disposed of. First consideration will be given to state indemnity selection; the second consideration to exchanges. Ultimately, they may be offered for sale or lease.

Specific aspects of the Land Tenure Adjustment Program are discussed below.

a. State of California

State school grant sections are scattered throughout the CDCA. BLM and the State have been working for some time to develop an appropriate exchange package. Opportunities exist for the State to block up important ownerships for State parks, State ORV areas, State fish and wildlife areas for the protection of State-listed rare and endangered species, and for the production of income from resource use and management. This exchange program will be actively pursued in the CDCA.

b. Southern Pacific Land Company

An exchange program specifically designed to deal with BLM management problems encountered adjacent to Southern Pacific land will be prepared.

Approximately 819,000 acres of checkerboard and scattered Southern Pacific land is co-mingled with BLM land (approximately 40 percent of the land in this pattern belongs to Southern Pacific). This land pattern is of little benefit to the public or the Southern Pacific Land Company; management is difficult and inefficient. BLM land management policies in this location directly affect Southern Pacific lands, and company activities have impacts upon public lands. Joint management of this area would not prove meaningful to either Southern Pacific or BLM as management goals and objectives of each are not necessarily the same for a similar area.

BLM will discuss a mutually beneficial land exchange program with the Southern Pacific Land Company. This program will detail which Southern Pacific lands the BLM wishes to acquire and which lands the BLM will be willing to offer in exchange. The magnitude of this program will depend upon management and the program funding of both BLM and the Southern Pacific Land Company.

c. Needs of Desert Communities

The BLM will consider the special needs of Desert communities for land for public services or the need for key public parcels within communities adjacent to developing areas. The BLM will consider transfer of ownership to the appropriate local government based upon the community's general plan and future public service requirements.

d. Boundary Adjustments with Other Agencies

Boundary adjustments with other agencies such as the U.S. Forest Service and the National Park Service will improve management of Federal lands. These adjustments will be minor, but will nevertheless provide for more efficient land management for the agencies involved. For example, boundary adjustments might be made between the U.S. Forest Service and the BLM where the forest boundary meets the BLM desert boundary. Portions of the existing boundary are not necessarily a straight line or the most management efficient boundary.

Public lands withdrawn for military purposes in the CDCA are undergoing review as part of the withdrawal review process established by FLPMA. This must be completed by 1991. Some boundary changes may be found necessary during that process.

e. Management of Unclassified Land in the CDCA

A total of 300,000 acres of scattered and isolated public land parcels in the CDCA which have not been placed within one of the multiple-use classes are considered unclassified land. These parcels are shown in white on Map No. 2, "Proposed Plan," in the back cover pocket of this document. Some of these parcels are known to contain significant resources such as the Coachella Valley fringe-toed lizard; many other parcels have not yet been inventoried.

BLM will retain or transfer to other appropriate managing agencies those unclassified parcels containing sensitive resources. Parcels with known mineral resources will be selectively retained. Parcels which are found not to contain sensitive resources and would be better used for development purposes will be considered for disposal after appropriate inventories and consultation with local government are completed. The most common form of disposal for smaller parcels is competitive bid (sale) at fair market value. However, exchanges, or even leases and permits, may be considered for these smaller tracts of land if an economically sound proposal in the public interest can be developed. Public roads will be used to gain access to these isolated parcels. Otherwise, access to these tracts would require traversing (and thereby trespassing) or obtaining a road easement over private property.

3. IMPLEMENTATION

General guidelines for land tenure adjustments are based upon the land acquisition requirements for resource management and protection detailed in the various elements, especially Wildlife, Vegetation, Cultural Resources, Native American Values, Recreation, and Wilderness, and in the Area of Critical Environmental Concern Section. Therefore, an important part of plan implementation is the acquisition of owned parcels adjacent to sensitive areas, as well as within motorized vehicle recreation areas.

It is important to recognize that a land exchange program which specifically deals with sensitive resource protection and enhancement of recreation opportunities is an essential action program for Desert resource management. Without such a program the BLM will continue to be at a disadvantage concerning the management of recreation and sensitive resources adjacent to private or State-owned property; access and trespass may be difficult or nearly impossible to control to protect both BLM resources and private or State-owned property. These acquisition requirements will be given priority ratings and programmed for implementation beginning in 1981. BLM has already initiated discussions on the larger land exchange programs with the State of California and Southern Pacific Land Company. These overall exchange programs are in initial stages of development.

The ownership status of land in the CDCA is shown in Table L-1.

Table L-1

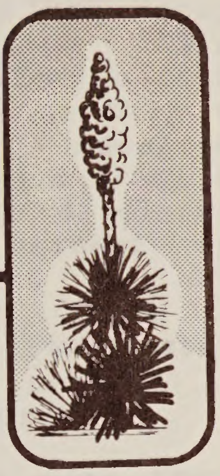
CDCA Land Ownership/Adminstration

	Acres(000)	%
FEDERAL	18,551	
BLM Public Lands(12,131)		47.2
National Monuments(2,497)		9.7
Military(3,172)		12.4
Other(751)		2.9
STATE OF CALIFORNIA	885	3.4
PRIVATE	6,237	
Southern Pacific(819)		3.2
Other(5,418)		21.2
TOTAL	25,673	100.0

Areas of Critical Environmental Concern and Special Areas

IV

pp. P95–102



A. AREAS OF CRITICAL ENVIRONMENTAL CONCERN P-96

B. SPECIAL AREAS 101

IV. Areas of Critical Environmental Concern and Special Areas

INTRODUCTION

The vastness of the California Desert contains many areas endowed by nature or man with characteristics that set them apart. These areas may be special because of unusual diversity of plant or animal life, unique geological features or fossil deposits, rare concentrations of the remains of prehistoric or historic use and occupation, or other significant values. Two management programs address these areas: Areas of Critical Environmental Concern and Special Areas.

The Federal Land Policy and Management Act (FLPMA), in Section 103(a), defines an Area of Critical Environmental Concern (ACEC) as an area "...within the public lands where special management attention is required (when such areas are developed or used or where no development is required) to protect and prevent irreparable damage to important historic, cultural, or scenic values, fish and wildlife resources, or other natural systems or processes, or to protect life and safety from natural hazards."

The ACEC designation is more than a recognition program; it is a process for determining what special management certain important environmental resources or hazards require and for priority commitment that this management will be provided. Management prescriptions are developed for each area proposed for ACEC designation prior to designation. The requirements are site-specific and may include actions which BLM has authority to carry out, including posting signs, patrolling, and fencing, and recommendations for actions which BLM does not have direct authority to implement, such as cooperative agreements with other agencies and mineral withdrawals.

Management prescriptions for ACECs override the multiple-use class guidelines for the areas in which they are located.

Other areas which possess rare, unique, or unusual qualities of scientific, educational, cultural or recreational significance may have one of eleven types of "Special Area" designations applied to them. A number of these sites have already been formally recognized and eleven new sites are proposed. In conjunction with ACECs, Special Areas are important management tools which complement the broad regional management of the multiple use classes and the resource and activity-specific perspective of the Plan Element.

A. Areas of Critical Environmental Concern (A.C.E.C.)

1. GOALS

The objectives of the Areas of Critical Environmental Concern Program are to:

- Identify and protect the significant natural and cultural resources requiring special management attention found on the BLM-administered lands in the CDCA;
- Provide for other uses in the designated areas, compatible with the protection and enhancement of the significant natural and cultural resources;
- Systematically monitor the preservation of the significant natural and cultural resources on BLM-administered lands, and the compatibility of other allowed uses with these resources.

2. SELECTION OF POTENTIAL ACECs

During preparation of the Draft Plan Alternatives, resource specialists from the Desert Planning Staff nominated 240 areas for evaluation as ACECs. Brief descriptive reports were prepared on these areas including special management requirements. Management evaluations of these 240 nominations resulted in 87 being recommended for designation. Boundaries of some of the 87 areas overlapped; the areas that overlapped were consolidated, yielding a total of 50 geographic areas recommended for ACEC designation.

After public review of the Draft, all areas originally nominated, including the 50 proposed and 13 new nominations, were reassessed by the Desert Planning Staff resource specialists employing public input, the BLM ACEC guidelines, the Proposed Plan multiple-use class map, and the Proposed Plan elements. The specialists nominated 184 areas for review as ACECs.

The 184 "nominated ACECs" were reviewed and analyzed by the CDCA Resource Area Managers and resource specialists using criteria of "relevance" and "importance" (see the May 1, 1980 BLM draft Final Guidelines for Areas of Critical Environmental Concern, available at BLM offices). These 184 areas were nominated by staff and the analyses were forwarded to a management steering committee composed of the BLM Riverside and Bakersfield District Managers and the Desert Plan Staff Director.

The steering committee reviewed the specialists' analysis and conducted a review for manageability. The manageability analysis considered: 1) whether the proposed ACEC boundary encompassed an appropriate unit and was adequate to permit effective protection, 2) present and/or potential threats to each area, 3) whether the protection provided by the multiple-use class would provide adequate protection, and 4) public comments. The steering committee then recommended 117 of the 184 areas as identified "proposed identified ACECs" in the Proposed Plan. Boundaries of some of the 117 areas overlapped; the areas that overlapped were consolidated, yielding a total of 73 "proposed identified ACECs." These areas will become "Potential ACECs" when the State Director approves the Proposed Plan and Final EIS. These areas are shown on the multiple-use class map of the Proposed Plan (in the back cover pocket), the ACEC and Special Areas map (following this section's narrative), and on the element maps for the various resource and activities which nominated the ACEC. Based upon public review of the Proposed Plan, and with the approval of the Secretary of the Interior of the final Plan, these Potential ACECs will become "Designated ACECs," and noted in official files and Master Title Plats (the official records of public land status).

Table AC-1, following this section's narrative, describes the 73 Potential ACECs. ACEC names are intended to describe a well-known feature in, or near, the area. For, all nominations, including those recommended for ACEC designation, a documentation summary describing resources involved, location, and rationale for nomination and decisions is provided in Appendix IV. The special management prescriptions identified for each recommended area are included in that Appendix. These are also briefly summarized in Table AC-1. Using the reference numbers from this table, the locations of proposed ACECs in the CDCA can be found on the Map following the table (this map also shows Special Areas, described in the next section).

3. NOMINATION OF NEW AREAS

Requests for consideration of a new ACEC or special area may be submitted to BLM offices at any time following Plan approval. Members of the public, including representatives of State and local government, may nominate an environmental or cultural value to be considered for ACEC identification. Such nominations should be accompanied by maps and descriptions, together with available evidence on each area's relevance and importance, as described in the August, 1980 Final Guidelines for Areas of Critical Environmental Concern. Designation of new ACECs will require Plan amendments that are subject to public review.

4. ACTIONS FOLLOWING PLAN APPROVAL

Following Plan approval, three actions will occur: 1) immediate implementation of those special management prescriptions described for each area (see Appendix IV), 2) publication of the list of designated ACECs and their legal descriptions in the Federal Register, and 3) preparation and implementation of activity plans within two years. Those actions included in the immediate implementation of special management prescriptions for each ACEC may identify the need for more detailed management objectives (including monitoring programs) that will be developed in the ACEC activity plans to be completed. These plans will be prepared by, and in consultation with all relevant resource disciplines in order to properly consider all resources and uses present.

The listing of ACECs in the Federal Register will complete the final step in the formal designation process. The ACECs will also be included on the Master Title Plats. An activity plan prepared for each ACEC is the vehicle for translating the special management requirements into ongoing on-the-ground implementation actions. The activity plans will vary in size and complexity depending on the nature of the resources and resources/uses within the ACEC.

The activity plan will clearly identify the ongoing management objectives of the ACEC. The activity plan will include a description of types of future uses, activities, or management practices that are considered compatible with the purposes of the ACEC, as well as a description of any existing incompatible uses, activities, or practices within the area and a schedule for implementation. The activity plan will also include the "details" of implementing the special management requirements, e.g., patrol schedules; specifications for facilities, etc. The activity plans will provide additional detail for the special management requirements, and will involve public review and environmental analysis.

5. IMPLEMENTATION

a. Schedule

The Management Prescriptions presented generally as Table AC-1, and in detail as Appendix IV, will be implemented immediately upon Plan approval.

The listing and legal descriptions of ACECs will be published in the Federal Register within two months of Plan approval. This action is the last step in the formal designation process.

Activity plans will be prepared on a priority basis for all ACECs, and priority will be given to ACECs where the critical resources are most threatened. Activity plans for ACECs will be prepared within two years of Plan adoption. Interim management implementation actions under BLM authority will be initiated within two years.

b. Monitoring

Requirements for monitoring will be included in the activity plans. Monitoring is a continual check of the ACEC to identify any modification of existing conditions. Not all ACECs, or features within these areas, require monitoring with the same frequency or detail. Monitoring data will be analyzed to detect change and its cause(s) and recommend corrective action.

Information on the status of ACECs will be included annually in the BLM's report to Congress.

6. SUMMARY OF MANAGEMENT PRESCRIPTIONS

A detailed set of management prescriptions for each recommended ACEC is presented in Appendix IV. The activity plans prepared during the first two years of Plan implementation will identify the long term management directives for each ACEC.

The special management prescriptions identified for each area are hand-crafted and site-specific. They are designed to meet the immediate management needs for each area: to alleviate threats to critical resource values by communicating to visitors the existence of sensitive sites and the need for caution, to protect specific sites by constructing barriers to prevent surface damage, and to provide other measures that result in immediate protection of the most environmentally important and fragile resources.

While the primary management focus for ACECs is the protection of important cultural and natural resources and human life and property from natural hazards, every effort is made to accomplish such protection without unnecessarily or unreasonably restricting users of public lands from uses that are compatible with that protection. ACECs are not areas in which no development can occur. Quite often, development, when wisely planned and properly managed, will take place in these areas if the basic intent of protection of historic, cultural, scenic or natural values is assured.

In the case of certain wildlife and cultural resources, surface disturbances from mining, vehicle access and grazing or other uses, will have to be controlled. For many areas, signs may have to be posted soliciting the cooperation of visitors. In some cases, fencing may be utilized to prevent unintentional impacts. Some valuable wildlife resources will require assistance in the way of reducing or eliminating competition for water sources or forage.

The cooperation of adjacent landowners may be necessary to assure the protection of some resources and cooperative agreements will be sought. Sometimes private inholdings occur within critical resource areas, and exchange or fee acquisition for these areas will be pursued. If additional knowledge is necessary to help protect some critical species or features, more intensive inventories will be conducted. The goodwill and cooperation of the many visitors to the public lands will be absolutely essential to the protection of many critical resource values. To encourage this cooperation, directional signs and visitor use areas will be developed and designated, and informational facilities and interpretive programs will be instituted to increase the knowledge and sensitivity of visitors to the protective needs of important natural and cultural resource values.

Saline Valley Dunes
(interior)

Bigelow Cholla
Dead Mountains

Table

Areas of Critical Environmental Concern

				General Management Requirements																	
Area Number	Name	Acres	Resource Values	Control and Sign User/Vehicle Access	Increase Field Presence	Control Grazing Use	Control Feral Horses and Burros	Restrict Mineral Exploration and Development	Monitor/Limit Water Development	Develop Additional Habitat/Water Sources	Regulate Collection of Resources/Firewood	Conduct Intensive Resource Inventory	Control Exotic Species/Introduce Native Species	Stabilize/Rehabilitate/Salvage Features	Develop Cooperative Agreement	Develop Complementary Activity Plan	Accelerate Implementation of Existing Plan	Exchange or Purchase Private Lands	Develop/Designate Visitor Use Areas/Facilities	Develop and Implement Interpretive Program	Establish Baselines/Monitor Resource Conditions
1	White Mountain City	640	prehistoric and historic values	X	X																
2	Deep Springs Valley Black Toad Habitat	320	wildlife	X		X				X			X		X						
3	Eureka Valley Dunes	5,120	rare and endemic flora and fauna; outstanding scenic quality	X	X																
4	Saline Valley	7,680	wildlife habitat	X			X			X				X	X	X	X	X	X		
5	Cerro Gordo	11,520	prehistoric and historic values; vegetation	X			X	X					X	X							
6	Darwin Falls/ Canyon	7,040	wildlife habitat; outstanding scenic quality	X	X		X		X				X								
7	Rose Spring	1,707	prehistoric values	X	X								X	X							X
8	Surprise Canyon	12,800	historic mining; outstanding scenic quality; wildlife habitats; vegetation; prehistoric values	X	X		X				X	X	X					X	X	X	X
9	Greenwater Canyon	4,960	prehistoric and Native American values	X	X															X	
10	Fossil Falls	2,580	prehistoric values																	X	
11	Sand Canyon	7,740	wildlife habitat	X	X												X				
12	Great Falls Basin	13,790	wildlife habitat; outstanding scenic quality	X	X		X		X						X			X	X		
13	Amargosa River/ Grimshaw Lake	12,005	wildlife habitat; vegetation; outstanding scenic quality; riparian area	X	X			X	X				X			X	X		X	X	
14	Kingston Range	19,845	wildlife habitat			X	X			X										X	
15	Mesquite Lake	6,720	prehistoric values	X	X									X							
16	Trona Pinnacles	1,680	outstanding scenic quality; unique geologic formations	X	X									X					X	X	X
17	Denning Spring	890	prehistoric and historic values	X	X									X	X						
18	Salt Creek (Dumont)	4,560	wildlife habitat; prehistoric values	X	X				X				X	X		X			X	X	
19	Clark Mountain	15,420	prehistoric and historic values; wildlife habitat; outstanding scenic quality	X			X			X		X								X	
20	Jawbone/Butterbread Area	145,130	wildlife; Native American values	X	X	X								X							
21	Last Chance Canyon	5,450	prehistoric and historic values	X	X							X								X	
22	Desert Tortoise Research Natural Area	15,360	wildlife												X			X	X	X	X
23	Christmas Canyon	8,330	prehistoric values	X	X																
24	Bedrock Spring	640	prehistoric values	X	X									X						X	
25	Steam Well	200	prehistoric and historic values	X	X															X	
26	Squaw Spring	640	prehistoric and historic values	X	X									X						X	
27	Goldstone	1,780	historic values	X	X									X					X	X	
28	Camp Irwin Boundary	1,030	prehistoric values	X	X										X					X	
29	Halloran Wash	890	prehistoric values	X	X							X									
30	Mountain Pass Dinosaur Trackway	1,580	historic mining area; paleontological values	X	X			X				X		X					X	X	
31	New York Mountains	42,100	wildlife habitat; outstanding scenic quality	X			X									X		X		X	
32	Camp Rock Spring	700	prehistoric and historic values		X									X		X				X	
33	Fort Piute	5,080	wildlife habitat; prehistoric and historic values; outstanding scenic quality; riparian area	X	X	X				X	X		X			X		X	X	X	
34	Dead Mountains	15,040	Native American values	X	X									X	X						
35	Black Mountain	6,380	prehistoric and Native American values	X	X									X	X						

Table

Areas of Critical Environmental Concern

Area Number	Name	Acres	Resource Values	General Management Requirements																	
				Control and Sign User/Vehicle Access	Increase Field Presence	Control Grazing Use	Control Feral Horses and Burros	Restrict Mineral Exploration and Development	Monitor/Limit Water Development	Develop Additional Habitat/Water Sources	Regulate Collection of Resources/Firewood	Conduct Intensive Resource Inventory	Control Exotic Species/ Introduce Native Species	Stabilize/Rehabilitate/ Salvage Features	Develop Cooperative Agreement	Develop Complementary Activity Plan	Accelerate Implementation of Existing Plan	Exchange or Purchase Private Lands	Develop/Designate Visitor Use Areas/Facilities	Develop and Implement Interpretive Program	Establish Baselines/ Monitor Resource Conditions
36	North Harper Dry Lake	640	vegetation	X														X			
37	Harper Dry Lake	1,120	wildlife habitat and riparian area					X	X			X	X	X	X			X		X	X
38	Kramer Hills	1,490	prehistoric values	X	X						X			X	X			X			
39	Rainbow Basin/ Owl Canyon	2,426	outstanding scenic quality; unique geologic and paleontologic features; prehistoric values	X	X									X	X			X			
40	Calico Early Man Site	1,300	prehistoric human occupation											X							
41	Fort Soda Mojave Chub	6,440	prehistoric and wildlife values	X		X												X		X	X
42	Mesquite Hills/Crucero	5,060	prehistoric values	X	X								X				X	X			
43	Afton Canyon	5,200	vegetation; wildlife habitat; outstanding scenic quality; riparian area	X	X							X	X		X		X			X	X
44	Silver Mountain Vicinity	1,620	historic mining and occupation area	X	X									X	X						X
45	Juniper Flats	2,950	prehistoric occupation; historic mining	X	X	X															
46	Upper Johnson Valley Yucca Rings	320	unique vegetation formation	X	X															X	X
47	Soggy Dry Lake Creosote Rings	400	unique vegetation formation	X	X													X		X	X
48	Marble Mountain Fossil Bed	500	paleontological values		X			X											X		
49	Whitewater Canyon	11,960	wildlife habitat and Native American values	X	X							X						X	X		X
50	Big Morongo Canyon	2,690	wildlife habitat					X		X	X	X						X	X	X	
51	Dale Lake	4,380	prehistoric values	X	X														X	X	
52	Patton's Iron Mountain Divisional Camp	6,830	historic military camp	X	X							X		X	X					X	
53	Whipple Mountains	3,280	Native American values	X	X						X				X						
54	Sidewinder Well	2,570	prehistoric values	X	X																
55	Palen Dry Lake	3,330	prehistoric values	X	X	X				X				X					X	X	
56	Corn Spring	6,390	prehistoric and historic values; outstanding scenic quality; vegetation; wildlife habitat	X	X						X	X	X	X					X	X	
57	Chuckwalla Valley Dune Thicket	1,910	wildlife habitat	X											X	X	X	X	X		
58	Mule Mountains	2,630	prehistoric values																X	X	
59	Chuckwalla Bench	39,360	wildlife habitat	X	X										X	X			X		
60	Salt Creek Pupfish/Rail Habitat	2,400	wildlife	X						X		X	X	X	X						
61	San Sebastian Marsh/San Felipe Creek	7,250	prehistoric, historic, and Native American values; outstanding scenic quality; riparian area; wildlife	X	X					X		X		X	X			X		X	
62	Fossil Site	1,360	paleontological values		X			X											X		
63	Coyote Mountains	1,660	prehistoric values	X	X							X		X						X	
64	Yuha Basin	4,560	prehistoric and historic values; wildlife habitat	X	X							X							X		
65	Lake Cahuilla #2	870	prehistoric values	X	X			X				X							X		
66	Lake Cahuilla #3	1,920	prehistoric values	X	X			X				X		X					X		
67	Gold Basin-Rand Intaglios	1,900	prehistoric values	X	X			X				X									
68	Indian Pass	1,660	prehistoric values	X	X						X										
69	Lake Cahuilla #5	4,730	prehistoric values	X	X			X													
70	East Mesa Flat-tailed Horned Lizard Habitat	36,560	prehistoric values; wildlife habitat	X X				X				X		X	X				X		
71	Lake Cahuilla #6	3,940	prehistoric values	X	X			X				X		X					X		
72	Plank Road	960	unique historic road	X	X							X		X			X				
73	Pilot Knob	2,450	prehistoric and Native American values	X	X			X													

* Only individual yucca rings will be fenced; Commercial Yucca harvesting will not be allowed.

** Only individual creosotebush rings will be fenced; area is otherwise open to vehicular free play.

B. Special Areas

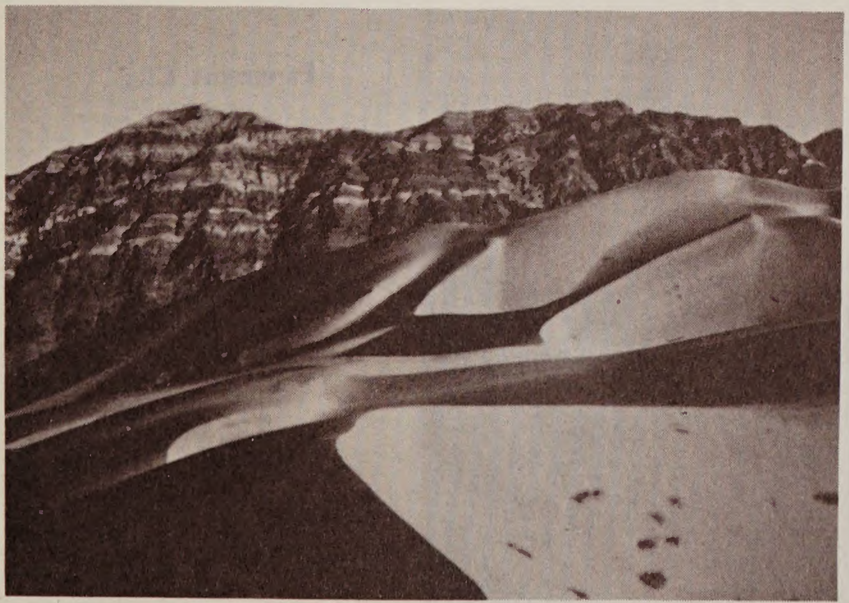
1. GOALS

The goals of the Special Areas Program are to:

a. Recognize significant natural and cultural resources found on BLM-administered lands in the CDCA.

b. Provide for other uses in the designated special areas, compatible with the protection and enhancement of the significant natural and cultural resources.

c. Systematically monitor the qualities of the significant natural and cultural resources on BLM-administered lands, and the compatibility of other allowed uses with these resources.



Kelso Dunes

2. ACTIONS PROPOSED

The multiple-use class guidelines for the class in which the area is located will provide the basic management direction for each special area. Where appropriate, activity plans will be prepared for special areas, and these plans will establish site-specific management directives.

Eleven Federal "special area" designation categories have been or will be used in this plan for the California Desert. They are:

- Research Natural Areas
- Outstanding Natural Areas
- Other Natural Areas
- National Natural Landmarks
- National Historical Landmarks
- National Register of Historic Places
- National Architectural and Engineering Record
- National Scenic Trail
- National Historic Trails
- Man and the Biosphere Reserve
- National Recreation Lands

These special area designations are described in detail in Appendix IV.

There are 11 specific geographic areas in the CDCA that are identified as special areas in this Plan[1]. These are shown on Map No. 22, "Areas of Critical Environmental Concern", following this section. These areas were evaluated for recognition and are designated applying one or more of these category designations. Evaluation factors considered were resource values, appropriate special designations proposed, and public comments. These 11 special areas and their designation categories are:

1. Panamint City - National Historic

   Landmark/National Register of Historic Places

   Historic American Engineering Record

2. Zinc Hill - National Register of Historic Places

   Historic American Engineering Record

   California Historic Landmark

3. Goldstone - National Register of Historic Places

4. Western Mojave Saltbush - Research Natural Area

5. Mojave Road - National Historic Trail

   National Historic Landmark

6. Cima Dome - National Natural Landmark

7. Kelso Dunes - National Natural Landmark

8. Granite Mountains - Research Natural Area/Man and the Biosphere Reserve

9. Pisgah Lava Flow - Research Natural Area

10. Butterfield Stage Route - National Historic Trail

11. Coachella Valley Fringe-toed Lizard - Research Natural Area

There are presently 35 special areas existing in the California Desert. These areas appear in Appendix IV.

Existing special areas will be evaluated during Plan implementation. These areas will be reviewed for appropriateness of existing designations, and designations will be adjusted as required.

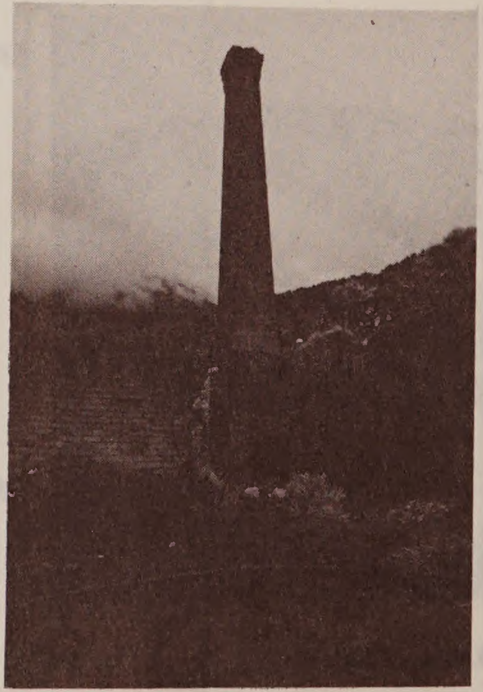
East Mojave

A number of identified Special Areas are included within the East Mojave region of the California Desert. The Proposed Plan recognizes these Special Areas and a host of outstanding and unusual values which exist in that region. Wilderness recommendations, ACECs and Special Areas are key components of the sensitive multiple-use management planned for the East Mojave.

Nomination of New Areas

Requests for consideration of new special areas may be submitted to BLM offices at any time following Plan approval. Members of the public, including representatives of state and local government, may nominate an environmental or cultural natural area to be considered for special area designation.

Designation of additional special areas may not require Plan amendments. These designations are primarily recognition-oriented. Special Area activity plans will be prepared where appropriate, according to schedules developed under the elements in which they fall.



Panamint City

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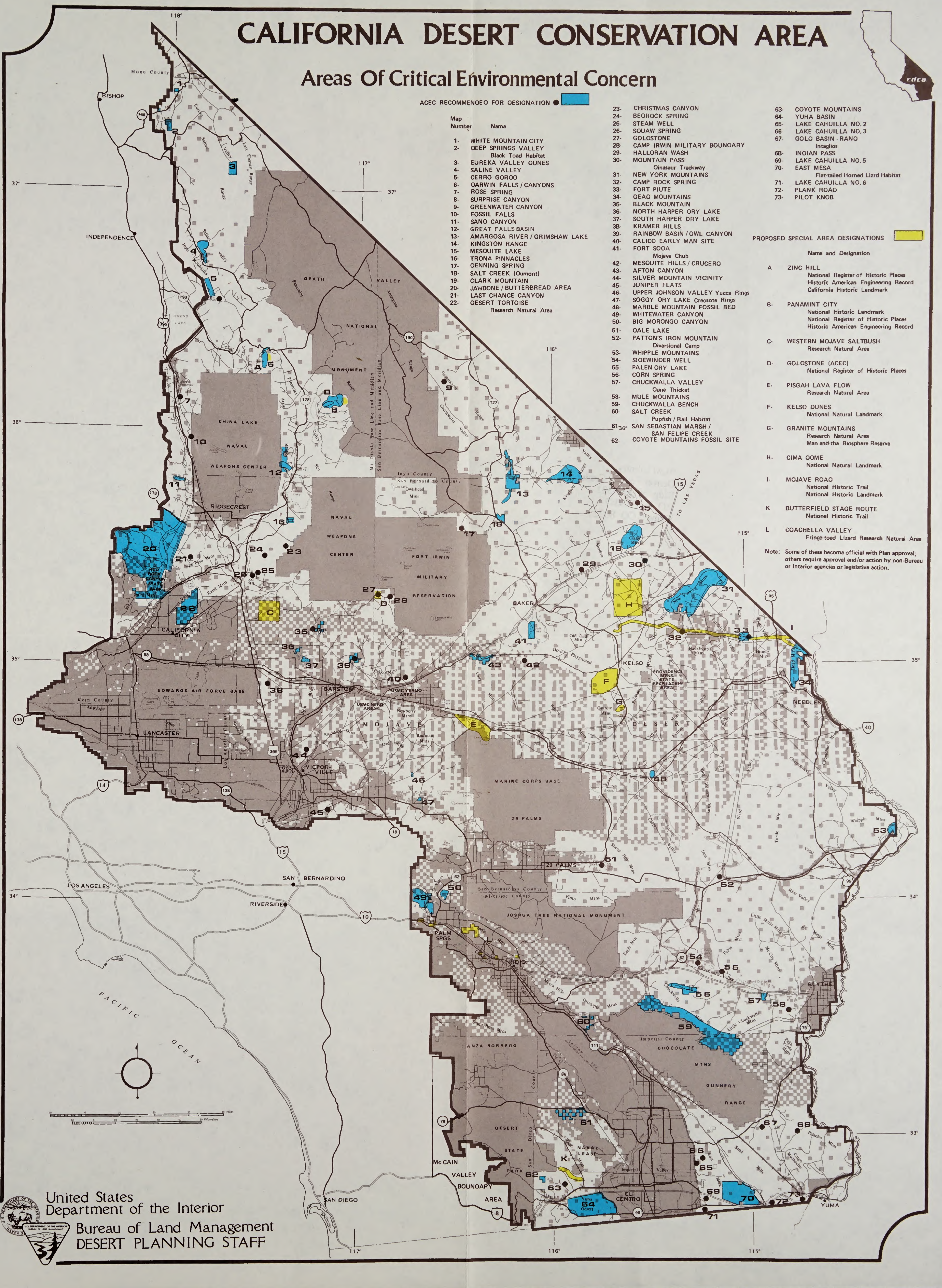
[1] Some of these designations become official with Plan approval; others require approval and/or action by non-Bureau agencies, or legislative action.

CALIFORNIA DESERT CONSERVATION AREA

Areas Of Critical Environmental Concern


cdca
118°
117°
116°
115°
37°
36°
35°
34°
33°
Mono County
BISHOP
INDEPENDENCE
OWENS LAKE
DEATH VALLEY NATIONAL MONUMENT
CHINA LAKE NAVAL WEAPONS CENTER
NAVAL WEAPONS CENTER
RIDGECREST
Inyo County
San Bernardino County
FORT IRWIN MILITARY RESERVATION
BAKER
KELSO
PROVIDENCE MTNS STATE RECREATION AREA
TO LAS VEGAS
NEEDLES
CALIFORNIA CITY
EDWARDS AIR FORCE BASE
Kern County
LANCASTER
BARSTOW
USMC YERMO AREA
USMC NEBO AREA
MOJAVE DESERT
VICTORVILLE
MARINE CORPS BASE 29 PALMS
29 PALMS
SAN BERNARDINO
LOS ANGELES
RIVERSIDE
Riverside County
JOSHUA TREE NATIONAL MONUMENT
PALM SPGS
INDIO
BLYTHE
Imperial County
CHOCOLATE MTNS GUNNERY RANGE
ANZA BORREGO DESERT STATE PARK
NAVAL LEASE
Mc CAIN VALLEY BOUNDARY AREA
EL CENTRO
YUMA
SAN DIEGO
PACIFIC OCEAN
Miles
Kilometers

ACEC RECOMMENDED FOR DESIGNATION ● 🟦

Map Number	Name
1-	WHITE MOUNTAIN CITY
2-	DEEP SPRINGS VALLEY Black Toad Habitat
3-	EUREKA VALLEY DUNES
4-	SALINE VALLEY
5-	CERRO GORDO
6-	DARWIN FALLS / CANYONS
7-	ROSE SPRING
8-	SURPRISE CANYON
9-	GREENWATER CANYON
10-	FOSSIL FALLS
11-	SAND CANYON
12-	GREAT FALLS BASIN
13-	AMARGOSA RIVER / GRIMSHAW LAKE
14-	KINGSTON RANGE
15-	MESQUITE LAKE
16-	TRONA PINNACLES
17-	DENNING SPRING
18-	SALT CREEK (Dumont)
19-	CLARK MOUNTAIN
20-	JAWBONE / BUTTERBREAD AREA
21-	LAST CHANCE CANYON
22-	DESERT TORTOISE Research Natural Area
23-	CHRISTMAS CANYON
24-	BEDROCK SPRING
25-	STEAM WELL
26-	SQUAW SPRING
27-	GOLDSTONE
28-	CAMP IRWIN MILITARY BOUNDARY
29-	HALLORAN WASH
30-	MOUNTAIN PASS Dinosaur Trackway
31-	NEW YORK MOUNTAINS
32-	CAMP ROCK SPRING
33-	FORT PIUTE
34-	DEAD MOUNTAINS
35-	BLACK MOUNTAIN
36-	NORTH HARPER DRY LAKE
37-	SOUTH HARPER DRY LAKE
38-	KRAMER HILLS
39-	RAINBOW BASIN / OWL CANYON
40-	CALICO EARLY MAN SITE
41-	FORT SODA Mojave Chub
42-	MESQUITE HILLS / CRUCERO
43-	AFTON CANYON
44-	SILVER MOUNTAIN VICINITY
45-	JUNIPER FLATS
46-	UPPER JOHNSON VALLEY Yucca Rings
47-	SOGGY DRY LAKE Creosote Rings
48-	MARBLE MOUNTAIN FOSSIL BED
49-	WHITEWATER CANYON
50-	BIG MORONGO CANYON
51-	DALE LAKE
52-	PATTON'S IRON MOUNTAIN Diversional Camp
53-	WHIPPLE MOUNTAINS
54-	SIDEWINDER WELL
55-	PALEN DRY LAKE
56-	CORN SPRING
57-	CHUCKWALLA VALLEY Dune Thicket
58-	MULE MOUNTAINS
59-	CHUCKWALLA BENCH
60-	SALT CREEK Pupfish / Rail Habitat
61	SAN SEBASTIAN MARSH / SAN FELIPE CREEK
62-	COYOTE MOUNTAINS FOSSIL SITE
63-	COYOTE MOUNTAINS
64-	YUHA BASIN
65-	LAKE CAHUILLA NO. 2
66-	LAKE CAHUILLA NO. 3
67-	GOLD BASIN - RAND Intaglios
68-	INDIAN PASS
69-	LAKE CAHUILLA NO. 5
70-	EAST MESA Flat-tailed Horned Lizrd Habitat
71-	LAKE CAHUILLA NO. 6
72-	PLANK ROAD
73-	PILOT KNOB

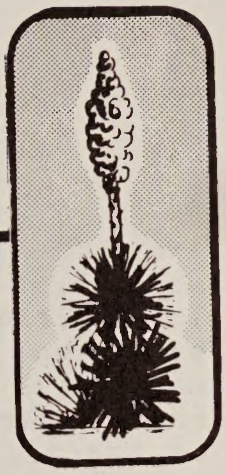
PROPOSED SPECIAL AREA DESIGNATIONS 🟨

	Name and Designation
A	ZINC HILL National Register of Historic Places Historic American Engineering Record California Historic Landmark
B-	PANAMINT CITY National Historic Landmark National Register of Historic Places Historic American Engineering Record
C-	WESTERN MOJAVE SALTBUSH Research Natural Area
D-	GOLDSTONE (ACEC) National Register of Historic Places
E-	PISGAH LAVA FLOW Research Natural Area
F-	KELSO DUNES National Natural Landmark
G-	GRANITE MOUNTAINS Research Natural Area Man and the Biosphere Reserve
H-	CIMA DOME National Natural Landmark
I-	MOJAVE ROAD National Historic Trail National Historic Landmark
K	BUTTERFIELD STAGE ROUTE National Historic Trail
L	COACHELLA VALLEY Fringe-toed Lizard Research Natural Area

Note: Some of these become official with Plan approval; others require approval and/or action by non-Bureau or Interior agencies or legislative action.

United States
Department of the Interior
Bureau of Land Management
DESERT PLANNING STAFF

Other Support Requirements



V

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A. SOIL RESOURCES PROGRAM P-104

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INTRODUCTION

Soil, water and air are the three most essential resource components of the California Desert Conservation Area. Management of these resources are interrelated with management of all other resources in the Desert. In order to successfully implement a Plan for the CDCA, it is necessary to develop and integrate methods for providing these resources with the special treatment and attention that will be necessary to assure good quality for maintenance and improvement of other resources in an ongoing program.

SOIL RESOURCES

The soil resource is the foundation of the desert, and the definition of the desert. All activities -- human or other -- affect this resource in various ways, creating impacts that range from minimal to major.

The BLM has conducted soil inventories at different detail levels over approximately 35 perent of the public lands in the CDCA. In addition, estimations have been made from aerial photographs of total area soils which have been highly impacted by human uses, including mining, motorized vehicle use and grazing.

There is a need for a better understanding of the interrelationships between activities occurring within the CDCA and the soil resource of the land. Only by accomplishing this objective can environmental quality be maintained or enhanced where necessary.

AIR QUALITY RESOURCES

Good air quality is one of the characteristic traits of the California Desert. In fact, many of the present residents in the CDCA have moved to the desert to avoid air pollution in towns and cities. Also, some of the military bases which have been established in what is now the CDCA were located there because of the good air quality needed for military training and operations.

The Federal Land Policy and Management Act of 1976 and the Clean Air Act amendment of 1977, along with Executive Order 12088 of 1978, Federal Compliance with Pollution Control Standards, require the BLM and other Federal land management agencies to preserve and protect air quality related to values on Federal lands.

WATER RESOURCES

Water resources within the CDCA are limited, as in any desert or arid ecosystem. Where significant quantities of surface water do occur, unique and rare riparian and aqautic habitats are often found. More information concerning these surface water sources must be collected as a basis for management direction and decision. Development of water supplies within the CDCA is necessary for maintenance and enhancement of various natural resources and improved management opportunities.

Potentially usable groundwater supplies are believed to be relatively plentiful; however, present knowledge is limited and much more detailed data will be required. More information on the occurrence and quality of available groundwater supplies and sources must be collected and evaluated before long-term management decisions can be effective.

ADDITIONAL SUPPORT PROGRAMS

Two other BLM programs are important in the support of resource protection and the maintenance of environmental quality:

Trespass

Trespass is the unlawful use of public resources and public lands. It is a problem which affects legitimate users of public lands, affects the natural and cultural resources available on those lands, and affects the ability of responsible land managers to manage properly for the general public welfare.

Trespass directly or indirectly impacts the Bureau's ability to manage the public lands, whether it occurs in the CDCA or in other areas under the administration of BLM. Trespasses, for example, result in lost revenues to the public as a result of uncollected fees; in adverse impacts to the environment; and, in costs incurred when corrective action is taken to terminate the trespass. Even local governments may be monetarily affected by trespass as a result of lost revenues from uncollected taxes.

Trespass diminishes everything it touches -- natural resources, cultural and human values, budget, tax bases -- even the person who, by trespassing, has broken the law.

Cadastral Survey

Historically, cadastral survey needs in the CDCA have received low priority because of such management and administrative requirements elsewhere in the State of California as energy needs, timber requirements, and trespasses.

Cadastral surveys are required to resolve boundary locations in areas of extreme obliteration of survey evidence, or in areas which have a gross misalignment of boundaries due to hiatus and overlapping survey performed by contract in the late 1800s. In many areas, fewer than 20 percent of the original survey corners can stll be located, and new ones must be established to determine land ownership and jurisdiction.

The following section discusses how these programs will proceed in the CDCA.

A. Soil Resources Program

BLM has conducted studies to understand better the effects of soil impacts. Investigations were made of soil compaction and its relation to plant growth, valley fever fungus in ORV activity areas, wind erosion threshold velocities, nitrogen fixation in various activity areas and fugitive dust from motorized vehicle races and other motorized vehicle activities.

The ongoing soils program within the California Desert District will continue the following activities: 1) Soil Studies to better understand impacts on the soil; 2) Soil Inventories to determine areas where uses will be best suited; and 3) Monitoring to determine the extent of impacts and long- term trends.

1. SOIL STUDIES

Reclamation of motorized vehicle use open areas (particularly hillclimbs) is a possibility that will be investigated. This would not be done to restore the area to its original condition, but to keep hillclimbs or other motorized vehicle use areas in such a condition that they can be continuously used in the future and reduce spreading of the use to new areas. Restoring soil to eroded hillclimb areas such as gullies and smoothing the surface should be attempted in "open" areas such as Dove Springs to determine the feasibility of routinely rehabilitating disturbed soils.

Wind erosion depends not only on soil properties, but also on a number of other variables including erosion fetch (length of disturbance of eroding area). With decreasing distance of disturbance a maximum rate of erosion per unit area will be reached. Thus areas of tracks with loose soil interrupted by stabilized, untracked soil may have much lower rates of wind erosion than areas with longer continuous disturbances such as pit areas, campsites, or roads. To determine the relation between lengths of erosion fetch and rate of wind erosion per unit area, studies should be done both with a wind tunnel and under natural wind conditions. The wind tunnel studies could be done in a limited time, whereas field studies may require several years. The data would be useful for estimating wind erosion potential of various dimensions of disturbances in desert soils.

A question which continually arises concerns longevity of visible soil disturbances such as tracks from a race. A study on duration of tracks on different types of desert surfaces is an inventory need. This would involve periodic observation of tracks on various types of surfaces over a period of years. The cost and total time required for such a study would be relatively low.

Nitrogen fixation by soil microorganisms may be an important input for desert plant nutrition. Skujins, et al. (1979) studied effects of cattle, off-road vehicles, and utility corridors on desert nitrogen fixation. While useful preliminary results were obtained the studies were not sufficiently comprehensive to be conclusive. Further studies lasting several years are needed to investigate the relationship between human and livestock impacts on desert soils and nitrogen fixation.

A study of soil impacts from mining should be done in greater detail primarily with the use of aerial photographs. Calculations could be made of total areas which have lost a substantial part or all of the soil profile. This should be done desert wide and could make use of existing Desert Plan aerial photographs.

The off-road vehicle impact study test sites should be continued. Periodic evaluation of these test sites to determine longevity of impacts from these vehicles and the analysis of these impacts will be a continuous program.

Studies will be continued with LANDSAT as a tool in aiding the soil scientist to properly evaluate the soils as it occurs on the landscape. Much has been done with JPL in establishing the basic framework, but more time and effort is needed to expand on the data base and experiment with spectral data from other overflights.

2. SOIL INVENTORIES

A map of potential arable lands in the CDCA has been prepared by the Water and Power Resource Service (formerly the Bureau of Reclamation). Soil inventories will be most useful in these potential arable lands for the future prospect of agriculture.

Soil inventories will be useful in planning for other uses such as rights of way corridors and motorized vehicle race routes. These inventories can be used to provide estimates of soil sensitivity to impacts, but should not be confused with monitoring which measures actual soil impacts. Soil inventories of different levels of detail (Order 3, 2 and 1) should be conducted in areas throughout the CDCA where appropriate. (See Appendix XI for list of soil inventories conducted throughout the CDCA).

3. MONITORING

Use of aerial photographs and field checks will be used as a basis for monitoring soil impacts. Areas of very high soil impact from motorized vehicle use have been calculated for many use areas throughout the CDCA as shown in the Appendix XI. The uses and limitations of the data are also discussed in the Appendix. This method could be used as a monitoring system by updating aerial photographs of these areas and comparing the high soil impact areas. The same types of comparisons can be made for heavily grazed sites and mining locations. Additional 1:1000 aerial photographs and on-the-ground investigations should also be included in the monitoring program. Better methods of evaluating erosion conditions should be established using low level (1:1000) aerial photographs as a base. A system of updating these low level aerial photographs will be needed to establish erosion trends.

B. Air Quality Program

In the CDCA much of the air pollution that affects Federal lands originates in the Los Angeles Basin and is transported onto BLM lands by the prevailing winds. BLM has no control over these "imported" pollutants. However, sources of pollutants originating in the CDCA are becoming increasingly significant. These "local" sources include fugitive dust from agriculturs, mineral extraction, vehicle activity, industrial sources such as power plants, ore processing and refining facilities, and "urban" sources such as residential heating, automibles, etc.

There are certain actions that BLM can and will undertake to minimize and reduce air quality degradation from sources on federal lands. These include coordination with and full support of State and local government air quality planning efforts, conducting in-house planning to minimize air pollution sources on public lands, and field studies to determine the impact of BLM management activities and those from outside sources on BLM lands. Air quality data is very limited in the CDCA. The specific elements of the air quality program are outlined below.

1. STUDIES

A concern of the BLM is dust generated by vehicles. In planning for and managing open areas and access routes, BLM's soil and air quality scientists will continue field tests to determine what areas generate the minimum amount of dust. These tests include monitoring of actual events and the use of a portable wind tunnel to determine wind erosion potential of various soil types.

Also, the Bureau is taking an aggressive role in visibility protection, along with the National Park Service, by establishing visibility monitoring stations in the CDCA. These stations will provide baseline meteorological data, visibility along two site paths at each station location. A computer analysis and visual prediction capability is being developed by the U.S. Environmental Protection Agency, Environmental Monitoring and Support Laboratory, Las Vegas, Nevada, so that the data gathered can be used to predict the impacts of our future management activities. Although most of BLM's monitoring efforts have been initiated "in-house", the BLM is anxious to work with other Federal, State, and local air quality agencies on air quality monitoring studies of mutual interest in an effort to obtain the maximum amount of data with the available resources.

2. COORDINATION

Currently, the BLM through its intergovernmental planning effort is in contact with State and local air pollution agencies with respect to nonattainment and air quality maintenance planning. The Clean Air Act Amendments of 1977, which mandated these planning efforts, stipulated that local government be responsible for preparation of these air quality plans. Therefore BLM's role is to fully integrate these plans into its own planning efforts. BLM will continue to coordinate with and provide full support of these local planning efforts. Also, due to the large amounts of federally managed lands, the Bureau has joined with the other land managers and is a member of a Tri-Agency Air Quality Task Force with the National Park Service and Forest Service. Coordination between the Federal land managers, the military, and the Environmental Protection Agency have been major thrusts of the Bureau's Air Quality program and these efforts shall continue in the future.

C. Water Resources Program

Obviously, the water resources of the CDCA must be wisely managed. Demands on the water resource, however, result from a wide range of Bureau programs, non-Bureau initiated projects, as well as activities on the private lands within the CDCA. This fact coupled with such regulatory concerns as water quality, safe drinking water and floodplane management, and the necessity for establishing certainty of water rights , will require a multi-facted approach to water resources management. The involvement of several Bureau programs and cooperation with other government agencies and private concerns will be required.

The management approach is outlined in Tables SR-1 and SR-2. Table SR-1 presents the authorities and objectives of water resources management. Table SR-2 defines the various required tasks and identifies the authorities and objectives which are met through implementation of specific tasks.

OBJECTIVES AND AUTHORITIES

Table SR-1

Objectives and/or Authorities of CDCA

Water Resources Program

1) Clean Water Act: The purpose of Bureau implementation of this Act is to prevent water quality deterioration and to improve water quality where it has already been degraded. In addition to the Act itself, further direction is given by Executive Order 12088 which instructs the Federal government to comply with water pollution control regulations, and by the 208 Water Quality Management Report (California BLM, 1979).

2) Safe Drinking Water Act: The purpose of complying with this act is to insure safe drinking water in accordance with applicable drinking water standards. Executive Order 12088 instructs Federal agencies to implement the act.

3) Floodplain Management: The purpose of floodplain management is the avoidance of adverse impacts resulting from the occupancy and modification of floodplains.

4) Water Rights: Presidential messages of June 6 and July 12, 1978, provided the initiative for establishing certainty in regard to Federal and State relations in water rights. The DOI Solicitor's Opinion #M-36914 of June 25, 1979, was an initial step in clarifying Federal and State roles. Ultimately, however, Federal water rights must be identified and quantified. This will be accomplished through an inventory of existing Bureau water uses and needs, in relation to existing or needed water rights. Procedures for Bureau compliance with State water right laws will be identified in Bureau Manual 725D, Water Rights. This manual will be used in complying with acceptable State procedures to obtain water rights for Bureau management programs, wherever possible. This effort will be undertaken in close coordination with the State of California.

5) Water Development: Several Bureau management programs specified in the Federal Land Policy and Management Act require the use of developed water supplies to insure the availability of water supplied, in addition to obtaining and protecting water rights, adequate data concerning the occurrence of surface and groundwater must be available to facilitate the location of developments.

TABLE SR-2

Tasks of the CDCA Water Resources Program

Task	Definition	Objectives And/Or Authorities
Water Rights Compliance	The acquisition and protection of water rights necessary for fulfilling Bureau management programs. Conducted under the substantive requirements of state law, with recognition of federal water uses and water rights and in accordance with Bureau of Land Management Water Rights Procedures.	4
Water Use and Needs Inventory	The collection of adequate information for securing water rights and documenting federal reserved water rights.	4
Regional Water Resource Inventories	The collection of data on surface and ground water quantity and quality on a regional basis. The data may be obtained within the framework of the Bureau planning system and utilized for a variety of specific purposes including background data for site specific water development, and in environmental impact analyses.	5
Water Development Investigations	The site specific investigation of water quantity and quality and other physical data required to properly locate wells and catchments and to construct wells, catchments and spring developments.	5
Water Quality Monitoring	The collection of data required to monitor baseline water quality, and the water quality impacts of activities. The data is utilized to avoid adverse impacts in accordance with the 208 Water Quality Management Report (California BLM, 1979).	1
Environmental Impact Analysis	The analysis of the impacts of various activities on water resources, including the collection of sufficient data to conduct adequate analysis and the formulation of recommendations for avoiding or mitigating impacts.	NEPA
Drinking Water Monitoring	Monitoring of chemical and bacteriologial quality of public drinking water supplies, and the implementation of appropriate treatment measures.	2
Floodplain Delineations	The determination of the magnitude of flood frequencies and floodplain mapping required - for the floodplain management program.	3
Special Studies	Studies may be required where impact analysis, need for water development, or other management objectives warrant a more detailed or analytical investigation than is routinely required.	1, 2, 3, 4,
Non-Bureau Initiated Projects	The construction of water development, storage or conveyance facilities. Applications for projects will be processed under appropriate regulations and within the applicable multiple use class guidelines and corridor designations within the CDCA Plan.	

D. Trespass

There are several types of trespass: occupancy and enclosures, such as an unauthorized cabin in a recreation area; mining claim occupancy, the use of a mining claim to perform activities which are not in good faith with the general mining laws; rights-of-way, roads, powerlines, pipelines; agricultural, the use of public lands for crop production; and the use of timber, mineral, grazing, and cultural resources. Miscellaneous types of trespass include such unauthorized uses as advertising displays, warehousing, stockpiling of material and motion picture filming.

The number of suspected annual trespasses which have occurred or are continuing to occur in the CDCA is estimated to be in excess of 500. If a trespass is not corrected, there is a loss of public resources; public landowners are denied the use or enjoyment of their land; and, disrespect for the law and the authorization process, with which most users of public lands comply, results.

The personnel required to eliminate a trespass depends upon the type of trespass. The most effective trespass program is a strong prevention program. Such a program includes the following steps:

a.) Prevention: Surveillance, especially for misuse of the Mining Law of 1872 by illegal occupancy. Cooperative agreements with state agencies and local governments and public utilities. Public information and education.

b.) Detection: By Bureau personnel, field reconnaissance, state and local governments, informal reports from the general public.

c.) Proper Use Management: Correction by authorization of legitimate use by permit, sale, exchange, if appropriate.

d.) Removal: Notices, appraisal of damages, collection of damages, and removal of trespass.

E. Cadastral Survey

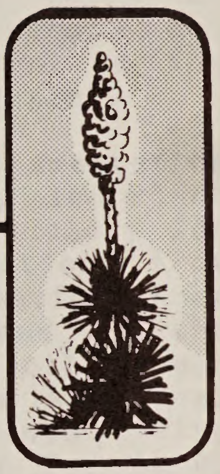
Due to increasing use of public lands within the CDCA, specific survey needs must be met in order to permit knowledgeable and proper management of public lands.

Programs which require immediate survey support are scheduled in the next 5 years and include energy (geothermal leasing), trespass abatement (agriculture and occupancy), realty, and recreation. Those survey projects are listed in priority in 5 year plan on file with the District Office.

Additional survey requirements have been identified as priority needs within the '81-'85 program. These consist of 45 separate survey projects which average 2,000 or more acres in size. These surveys are required to permit various realty actions such as acquisition, easements, and trespass abatement to proceed. The projects are in areas of mingled Federal/private ownership where original surveys are not clearly definable. High priorities also exist in the Helendale and Granite Mountain areas south and west of Barstow.

Protraction diagrams cover more than 200,000 acres of unsurveyed lands within the CDCA. Boundaries of many State school sections and mineral leases are not monumented on the ground which prevents total management of the adjacent public lands. These lands will likely be surveyed under private contracts as priorities are determined.

Implementation



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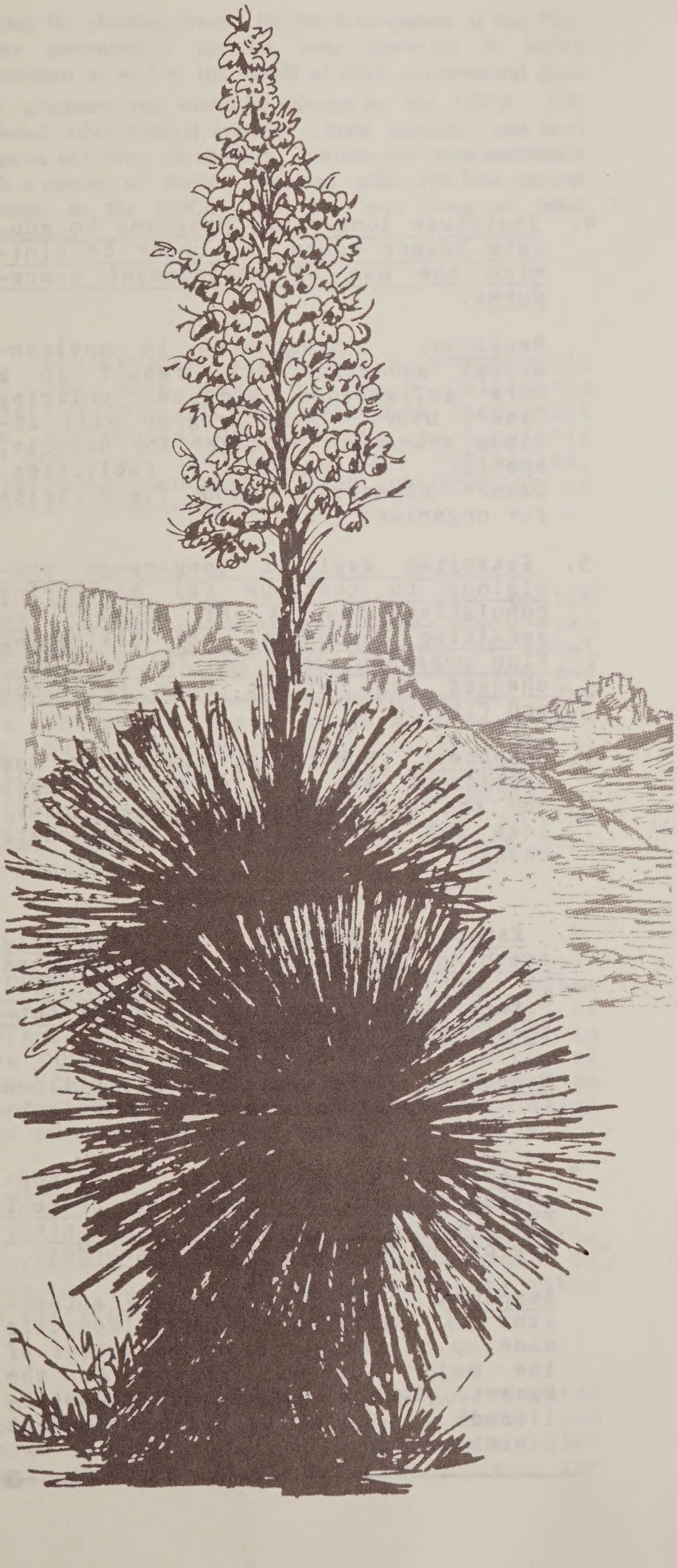
VI. Implementation

INTRODUCTION

The California Desert Plan, established by law, carries a long-term commitment for the Bureau of Land Management to establish and maintain programs for comprehensive management of the California Desert and the public lands in the CDCA.



The Plan, when complete, will be a management guide that will provide directions to land use managers in developing subsequent resource management plans during the implementation phase.

Without implementation, the Plan would be no more than a planning exercise; an intellectual toy, without meaning or result. Implementation is the key to results. It is the spark that breathes life into a paper Plan. Implementation is more than a promise. It is a contract with the public as to exactly how this Plan will be carried out, and what methods BLM will use over the coming years to assure that public needs, desires, and values will be met and protected on the public lands in the California Desert.

BLM has developed this implementation process to cover several very important areas. The first is the methodology for responding to formal recommendations from the California Desert Conservation Area Advisory Committee. The second is the pattern for coordination with all levels of government -- Federal, State and local - not just with those governments having jurisdiction and responsibility for lands or actions within the CDCA, but also with agencies who may affect, or be affected by, BLM actions in the Desert.

In order to implement a land use management plan over any area, from backyard landscaping to the 25 million acres of the Desert, it is necessary to monitor actions and their results, to measure effectiveness of any action, and to determine need for subsequent amendment or revision. Implementation includes a process for monitoring the Plan and for evaluating the results and taking corrective action, when necessary.

No Plan can be cast in concrete, and this one certainly is not. If changes need to be made, or there is a better way to do things, then the Plan will have to be amended. BLM's implementation approach outlines how this will be done: how changes can be initiated by individuals, organizations, governmental agencies, and the Bureau itself, and how those requests for amendment will be analyzed and decided through public involvement and participation.

It takes money to implement a Plan. It takes money to follow recommendations, to cooperate with others, to monitor, and to change. It takes money to manage, to recruit, and maintain an adequate personnel force, and to provide the public with answers and service. Budgetary requirements are the hardrock foundation for implementation of this Plan.

A. CDCA Advisory Committee

Recommendations

To assist the Bureau in designing long-range implementation goals for the California Desert Plan, the Advisory Committee established a special Committee Task Force to study the Plan and submit recommendations for its implementation. The CDCA Advisory Committee recommends the following implementation goals:

1. Establish an organizational structure that treats the CDCA as a single management unit.

   Response: This recommendation is being implemented in Fiscal Year 1981 with the establishment of a single California Desert District to manage the public lands in the CDCA rather than splitting the responsibility between the Riverside and Bakersfield Districts as is now the case.

2. Institute personnel practices that (a) insure the hiring of qualified staff committed to the goals of the Plan; (b) provide career incentives to retain CDCA-trained staff for more than short-term; and (c) specify orientation and training of staff on a periodic basis.

   Response: Qualified individuals who have an interest in and a desire to contribute professionally to the management of the Desert will be diligently sought out under the required Federal personnel regulations.

3. Authorize the use of volunteers to aid in establishing a BLM "presence" within areas needing protection.

   Response: The sucess of volunteer assistance in other agencies should serve as a model for the Bureau. There are numerous organizations and individuals who would support and participate in an auxilliary patrol or special surveillance program to prevent overuse, unauthorized collecting, and vandalism on the public land. In some cases the use of a volunteer resident caretaker may provide a means to help protect resources. Although some of this can be done today, BLM is pursuing legislation to authorize fuller use of volunteer services.

4. Institute long-range programs to educate Desert users, in order to minimize the use of enforcement procedures.

   Response: Investments in environmental education will result in a more enlightened and self-policing Desert user. This program will include education packages for schools, special interpretive facilities, Desert classrooms, and field trips for organized groups.

5. Establish explicit long-range provisions to continue (a) monitoring cumulative results of impacts on sensitive resources; (b) evaluating Plan manageability; and (c) assessing changes that affect Plan relevance and fitness.

   Response: Monitoring evaluation and assessment are continuing processes and the plan amendment process provides the flexibility to accommodate change.

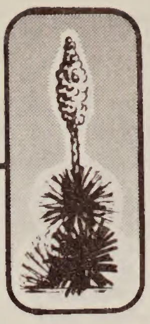
6. Establish methods for regularly amending the Plan within the mandates of the law (FLPMA, Section 601) rather than reacting to "put-out-the-fire" crisis changes.

   Response: This procedure is outlined in the Plan Amendment Process subsection.

7. Appoint a high-level citizens' advisory committee (not the present CDCA Advisory Committee) to monitor use of the CDCA lands and resources.

   Response: BLM Districts are authorized to establish advisory councils made up of citizen representatives of the major interest groups in the Desert. Such a council will be established for the California Desert District.

B. Intergovernmental Coordination



During the planning process for the development of this Plan, many governmental agencies were contacted to obtain suggestions as well as the details of other governmental plans and programs that would be relevant to the CDCA. This included other Federal agencies, State agencies, and local counties and cities. In addition, contacts have been established with a number of Native American tribes who have cultural interests in the CDCA and their own forms of tribal government.

Coordination with these groups will not end with adoption of a California Desert Plan. It will continue throughout the implementation process, particularly in areas of sand and gravel extraction, wilderness management, and designation of routes for motorcycle races.

Additionally, the need for public land for public purposes near local communities is an ongoing concern of local governments. This must be recognized and responded to in a cooperative manner. The use of public lands administered by BLM for public purposes requires consistency with county and city general land use plans for their individual communities. BLM involvement and coordination in the local governmental planning process will be required.

BLM will also have to maintain close coordination with the Department of Defense and with local military bases in the CDCA to insure that implementation of the California Desert Plan will be as consistent as possible with the mission and purposes of these bases.

BLM will also work toward encouraging assistance from these military bases in managing public uses on public lands within the vicinity of the bases.

Additional areas of intergovernmental coordination will include: State and local air and water quality programs; BLM land exchange programs; the process for amending the Plan; cultural resource management programs, especially with respect to local Native American concerns; energy projects; wildlife management, land management in areas adjacent to the boundaries of military bases and National Monuments.

Intergovernmental coordination will be an intensive, continuing, and participatory process of managing the public lands and resources in the CDCA and of implementing the California Desert Plan goals and objectives.

C. Monitoring

Within two years of final adoption of a California Desert Plan, BLM will have an additional monitoring program designed and implemented to measure the Plan's effectiveness and to specify needs for subsequent amendment or revision. The design, the measurement intervals, and the standards for revision will be based on the estimated sensitivity of desert resources to management decisions which are a part of the Plan. This program will supplement BLM's routine monitoring measures of on-the-ground management, surveillance and use supervision of grazing leases and other public land uses.

Monitoring and evaluation intervals will not exceed five years. Where and when necessary, the intervals will be more frequent. Threshold levels will be established and monitored for key resource components in the CDCA such as threatened, endangered, rare or sensitive plant and animal species and their ciritcal habitats. When such levels are found to be met, or exceeded, corrective actions will be undertaken, including amendments to the Plan, if necessary.

Similarly, plans of other Federal agencies, State and local governments, and Native American tribal governments will be followed to monitor changes having a bearing on the CDCA and the California Desert Plan. Other sources of new data will also be tracked. All monitoring and evaluation reports will be made available for public review.

Monitoring a large comprehensive resource and land-use plan can present a large, complex, and expensive task. For the California Desert Plan it will be necessary to select only significant items with high sensitivity to planning decisions. Within these, key indicators will be selected that can be practically monitored. For tracking wide-spreading resource trends, a sound baseline of data will have to be selected from the extremely large amount of resource information collected in the planning process and, in some cases, further augmented. Statistically valid sampling systems will be designed.

Monitoring will employ two perspectives: measurement of impacts and measurement of mitigations. The principal perspective will cover broad areas such as common vegetative types or ecosystems. It will focus on the resources impacted from cumulative sources, with analyses for trends. Extreme variability in local area annual precipitation could make trend verification difficult. Usually, several interrelated resource conditions will be monitored by coordinated data gathering and analysis (e.g., for soil erosion, vegetation and wildlife populations).

A second monitoring perspective will focus on the measurement of impacts and mitigation effectiveness of one particular action on all the resources it is anticipated to significantly affect; e.g., effects of grazing on cultural and wildlife values. Such selected monitoring targets would be very limited, but intensively followed where information is needed for a particular class of action on a particular type of site (e.g., a producing hard rock mine in a sensitive environmental zone or off-road vehicle open play area inhabited by a sensitive wildlife species).

More specific information on planned monitoring efforts is given in a number of the various plan elements. Most give only the items of significance in terms of actions, conditions, and trends targeted for monitoring. General monitoring approaches are given in some cases, but specific designs and standards are left to be determined through the necessary analyses needed for the two-year period following Plan adoption.

D. Plan Amendment Process

The California Desert Plan has been designed to provide a guide for management over a long-term period. In order to do this, a process must be provided that will be flexible enough to permit changes in the face of unanticipated demands or response to future events that, as yet, cannot be foreseen.

The process for amending the Plan permits any person or organization, governmental or private, to suggest future changes in the Plan. It also provides for analyses of these requests, for decision-making, and for public input, review and participation in the entire process.

1. GENERAL PROCEDURES

A Plan amendment may be initiated at any time by the BLM State Director in response to new findings under the continuing monitoring, review, and revision procedures.

Individuals and public or private organizations desiring to have the Plan or any of its elements amended, may submit requests for amendment to the BLM California State Director. The State Director will respond in writing within 30 days; acknowledging receipt of the request and informing the applicant of the process to be followed in studying and deciding upon the requested amendment.

Amendment requests will be subjected to the prescribed environmental assessment and public involvement processes and to the fulfillment of interagency coordination and consistency requirements. If the environmental assessment results in a "Finding of No Significant Impact", the BLM State Director may file and issue a public notice on the intended amendment and implement action within 30 days if no protests are received. If significant impacts are found, an EIS on the proposed amendment will be required and will be processed under the same procedures as required for the original Plan.

Proposals for revision of the boundaries of the California Desert Conservation Area, or requests for changes in the Federal Land Policy and Management Act will be referred to the U. S. Congress for review and decision.

During the planning process, the need for one boundary adjustment and concurrent BLM study of the administrative organization best suited to implement the Plan was identified. The McCain Valley Area, encompassing approximately 150,000 acres of BLM-administered public lands along the present southwest boundary of the CDCA, has been determined to be an area that should be included in the California Desert Conservation Area and managed under the framework of the Plan, from both an ecological and resource management perspective.

A precise determination of boundary adjustment in McCain Valley will be made, existing Resource Management Plans for the area will be reconciled to overall Plan guidelines, and the proposed revision, with appropriate environmental assessment, will be processed under the standard Plan amendment procedures and referred to Congress in the form of a draft boundary adjustment amendment to the Federal Land Policy and Management Act of 1976.

Proposed revisions of the multiple-use guidelines, objectives, or decision criteria; and major revisions to Plan elements, including significant changes in use levels or facility location will be decided by the BLM California State Director under the amendment procedures outlined in this section.

2. INFORMATION REQUIRED

From Individuals and Private Groups

All requests for amendment must be submitted to the BLM California State Director. Any requests from individuals or private groups or organizations for amendments or changes to the California Desert Plan must contain the following information:

a. Reasons for the request.

b. An explanation of how the individual or the group or organization is being adversely affected by existing requirements or management objectives in the Plan.

3. INFORMATION REQUIRED

From Governmental Agencies

Requests from this source to change or amend the Plan must also be submitted to the BLM California State Director. Governmental amendment requests can be submitted by cities, by counties, by State agencies or other Federal agencies.

a. City

If the request for an amendment to change the Plan is being submitted by an incorporated city, the following information must be provided:

1. The request must have been approved by vote of the City Council.
2. The city must show how it has been, is being, or will be adversely affected by the Plan, or parts thereof.
3. The city must show how its proposed amendment is necessary for consistency with the officially adopted city general plan.

b. County

If the request for amendment is submitted by a county or county service area, the following information must be submitted:

1. The request must have been approved by vote of the County Board of Supervisors.
2. The county must show how it has been, is, or will be adversely affected by the Plan, or parts thereof.
3. The county must show how the proposed amendment is necessary for consistency with the officially adopted county general plan.

c. State

If request for amendment is being submitted by a department or office of the Executive Branch of the State of California, the follwing process must be followed:

1. The request must have been approved by the Executive Director or Secretary of the submitting agency after indication of coordination with other potentially affected State agencies.
2. The State must show how it has been, is, or will be adversely affected by the Plan, or parts thereof.
3. The State must show how the proposed amendment is necessary for consistency with adopted State plans or programs.

d. Federal Agency

If the request for amendment is submitted by a department, office, or bureau of the Executive Branch of the U.S. Government other than the BLM, these steps will be necessary:

1. The request must have been approved by the director of the submitting department, office, or bureau.
2. The agency must show how it has been, is, or will be adversely affected by the Plan, or parts thereof.
3. The agency must show how the proposed amendment is necessary for consistency with officially adopted plans or programs.

4. BLM INITIATED PLAN AMENDMENTS

A BLM-initiated amendment to the Plan must follow all legally prescribed procedures, including:

a. Public notification and participation

b. Coordination with State and local governments

c. Determination of environmental effects

d. Development of criteria tailored to the proposed revision issue

e. Approval of the amendement or revision by BLM California State Director

5. ANALYSIS OF PROPOSED AMENDMENTS

In analyzing any applicant's request for amending or changing the Plan, the BLM California State Director will:

a. Determine if the request has been properly submitted and if any law or regulation prohibits granting the requested amendment.

b. Determine if alternative locations within the CDCA are available which would meet the applicant's needs without requiring a change in the Plan's classification, or an amendment to any Plan element.

c. Determine the environmental effects of granting and/or implenting the applicant's request.

d. Consider the economic and social impact of granting and/or implementing the applicant's request.

e. Provide opportunities for and consideration of public comment on the proposed amendment, including input from the public and from Federal, State and local government.

f. Evaluate the effect of the proposed amendment on management's desertwide obligation to achieve and maintain a balance between resource use and resource protection.

6. DECISION CRITERIA FOR APPROVAL OR DISAPPROVAL

Before approving a Plan amendment the BLM California State Director must determine that the proposed amendment is in accordance with applicable laws and regulations, and will provide for the immediate and future management, use, development, and protection of the public lands within the CDCA. The BLM California State Director will base his rationale for such determination on the principles of multiple use and sustained yield and maintenance of environmental quality, as required in the Federal Land Policy and Management Act of 1976.

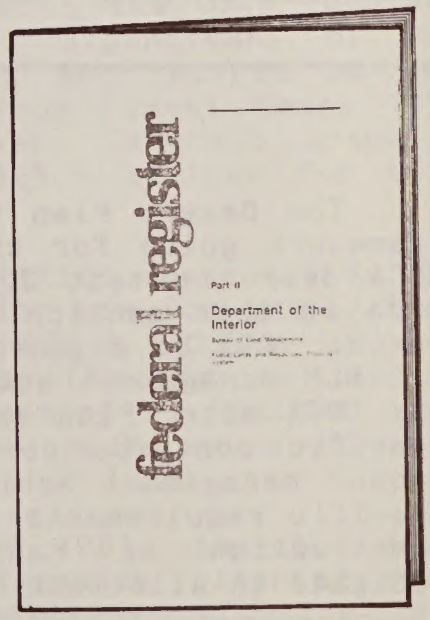
7. PUBLIC NOTIFICATION

Notification of proposed amendments or changes to the California Desert Plan will be published in the Federal Register. In addition, notices will also be published in a newspaper, or newspapers, of general circulation in the area which would be affected by the proposed amendment(s). Further, a Plan amendment mailing list will be developed by BLM and will include appropriate publications which publish material of interest to people concerned about public lands of the California Desert. All individuals, organizations, and other public agencies requesting notices of Plan amendment proposals or decisions will receive such notices. All notices and information will be published in this manner no later than 30 days prior to the first or subsequent public hearing.

All county boards of supervisors and all city councils located where incorporated limits and spheres of influence encompass the land area which might be affected by a proposed amendment to the Plan will be notified of such application to amend no later than 30 days prior to any scheduled public hearings.

8. PUBLIC HEARINGS

Before the BLM California State Director makes final decision(s) on proposed amendments(s), he may hold one or more public hearings to consider these proposals.



E. Budgetary Requirements

The California Desert Plan carries a long-term commitment for the Bureau to provide comprehensive management of the Desert and its resources. Increases in funding and manpower for Fiscal Year 81 are not anticipated to be significant. However, substantial budgetary increases will be required over the next 10 years to effectivly implement programs and planning decisions set out in the Plan. Although the Plan cannot be considered a specific budget commitment, it would, if adopted, represent a real commitment to do everything possible to assure that the stated goals, objectives, and policies set out in the Plan are met.

In passing the Federal Land Policy and Management Act of 1976 (FLPMA), Congress recognized the fragility of California desert resources and the pressures on them. Congress, therefore, directed BLM to complete a comprehensive land use management plan for the CDCA by September 30, 1980. FLPMA also mandates that implementation of the CDCA Plan must be initiated on or before September 30, 1980. Section 601 (a) (2) (d) reads as follows:

> "(d) The Secretary, in accordance with Section 202 of this Act, shall prepare and implement a comprehensive, long-range plan for the management, use, development, and protection of the public lands within the California Desert Conservation Area. Such plan shall take into account the principles of multiple-use and sustained yield in providing for resource use and development, including, but not limited to, maintenance of environmental quality, right-of-way, and mineral development. Such plan shall be completed and *implementation* thereof *initiated* on or before September 30, 1980." (emphasis added)

The Desert Plan was developed as the framework guide for the management of the CDCA over the next 20 years. Implementation in this section is used in two contexts: (1) In a general context, covering all BLM management activities occurring in the CDCA after Plan approval; and (2) in a specific context, covering those on-the-ground management actions that result from specific requirements of the Plan, such as construction of range improvements as designed in Allotment Management Plans.

The purpose of this section is to translate and schedule the identified needs into dollar and personnel requirements. If the level of funding described in this section is authorized and appropriated by Congress, on-the-ground actions, with the exception of land tenure adjustments should be fully implemented by 1990. Details for the first 10 years are presented later in this section.

1. MANAGEMENT SYSTEMS

A brief explanation of the BLM management system and budget process, as applied to the CDCA, is presented to facilitate understanding of the implementation process. The Bureau's management system is composed of four interlocking components:

a. Inventory and Resource Management Planning

b. Activity Planning

c. Implementation

d. Service, Operation, and Maintenance

The first three components of the management system are sequential. Service, Operations, and Maintenance are continual, but acquire increased empahasis after implementation of a management plan.

a. Inventory and Resource Management Planning

This component covers three steps: (1) management planning analyses; (2) inventory data collection; and, (3) resource management plan development.

The initial step has been completed for the CDCA. Through public input, significant issues and needs have been identified. Intensive resource, environmental, social, economic, and institutional data have been inventoried and gathered. The Proposed Plan and Final EIS have been prepared.

Inventory and resource management planning are a continual process, and will be further used in revising and/or updating the Plan through the Plan amendment process.

b. Activity Planning

After approval of a Plan for the CDCA, specific resource activity plans will be individually prepared to translate a land use management plan into on-the-ground, site-specific guidance, such as recreational facilities, fences, wells, trails, and other management investments that are a fundamental responsibility of the Bureau. The elements detail a variety of resource specific activity plans such as Habitat Management Plans and Cultural Resource Management Plans. When these proposed plans cover the same area on the ground they will be consolidated into coordinated resource activity plans to ensure efficient use of personnel and dollars and compatible recommendations.

The activity plans prepared immediately after Plan approval will be working prototypes - models to be followed and refined as Plan implementation proceeds. Site-specific environmental assessments will also be prepared at this time.

c. Implementation

Activity plans are not required for all implementation activities. Patrol and surveillance are ongoing and will continue at an increased level. Activity plans implemented in the past will continue in force as long as they are consistent with the Plan.

Upon the completion and adoption of resource activity plans, on-the-ground implementation is initiated . Facilities are constructed, educational and visitor assistance programs become functional, maps are printed and distributed, and monitoring systems are in full operation. The time required to implement an activity plan varies with the nature of the resource involved and the availability of staff and funding.

d. Service, Operations and Maintenance

All activities on public lands do not cease while inventory and planning, activity planning, and implementation are being accomplished. There are existing facilities and improvements to maintain, day-to-day requests for information, and requests for specific use authorizations to review, grant, and monitor.

While the Plan was being prepared, these kinds of activities took place as "interim management actions." The nature and relative importance of this component varies as changes occur in the demand for specific BLM services, and as resource management plans are implemented or amended. As an example, when new range improvements are constructed, it is essential that funding be available to cover the increased maintenance costs. Similarly, when geothermal resources are leased, staff must be available to monitor compliance with the BLM use stipulations. Monitoring of resources is also a function of this component. The Service, Operations, and Maintenance component is continual and will acquire increased emphasis after the completion and implementation of activity plans.

2. PROCESS USED TO DEVELOP BUDGET

For a 10-Year Time Frame

To implement comprehensive management for public lands, a long-term budget process is needed. The Bureau's four-year authorization process that Congress established meets this need. Under this process, the Secretary of the Interior must submit to Congress a funding authorization request detailing work for a four-year period of time, including an examination of alternative levels of funding that can be efficiently and effectively used in managing the public lands and resources.

Development of the four-year authorization process, like other BLM management actions, includes public involvement. It is an opportunity for Congress to evaluate BLM programs and progress. It also allows BLM itself, agencies of State and local government and the interested public to take a look at how far the BLM has come, where it has succeeded and where it has fallen short; to define its priorities and goals; and, to define its direction to shape the future of public lands.

The next four-year funding authorization, when approved by the Congress, will set the maximum funding levels for the BLM for Fiscal Years 1982 through 1985. The authorization establishes an upper limit on spending. After funds are authorized every four years, Congress then annually appropriates funds for BLM, establishing the actual budget for each fiscal year. The appropriation cannot exceed the authorization and rarely do the two coincide as demonstrated in the CDCA funding. FLPMA authorized an expenditure of $40 million for planning and interim management of the CDCA from Fiscal Years 1977 through 1981; however, Congress actually appropriated only $29.5 million for that same period of time.

Of the $29.5 million appropriated for the CDCA, $8.6 million was for preparation of a CDCA Plan and $20.9 million was for "interim" management (the service, operations, and maintenance functions and ongoing new actions such as geothermal development).

In Fiscal Year 1981, the BLM will shift from the management planning component to the activity planning and implementation components, while maintaining or slightly increasing levels of service, operations, and maintenance.

3. PRIORITIES FOR IMPLEMENTATION

Tables B-1 and B-2 show cost estimates for implementation of the Plan by element and for five management system components.

Implementation actions were analyzed and evaluated so that the most important work items could be accomplished first.

Action items were listed in priority order within the respective elements. Specialists participated and assisted in the priority rating of actions in other related elements (e.g., wildlife participated in the development of allotment management plan priorities and burro removal priorities because both have potential impacts on wildlife).

To look at implementation of the Plan as a whole, a system of priority rating of work acress elements was essential. The following factors were established in developing desertwide priorities:

a. Legal mandates (e.g., endangered species protection)

b. National priorities and policies (e.g., energy development)

c. Public demand (e.g., vehicle route approval)

d. Critical need for action (e.g., Areas of Critical Environmental Concern (ACEC) protection)

e. Condition of resource (e.g., burro population)

Because of the complexity of the CDCA and the interrelationship of implementation actions, some identified priorities overlap. The highest priorities, those items that should become first upon Plan approval, are summarized below. The order of listing does not indicate order of priority. All of these actions are of reasonably equivalent priority.

a. ACEC protection and management

b. Endangered wildlife and vegetation protection

c. Removal of excess wild burros

d. Vehicle route approval - in Class L

e. Mineral-surface Management

f. Development of interpretive materials and educational programs

g. Implement grazing decisions

h. Preparation of wilderness study reports

i. Initiation of major land tenure adjustments

j. Completion of Native American coordination procedures

k. Preparation and implementation of the most critical activity plans for recreation, cultural resources, wildlife, livestock, and wild horses and burros.

l. Development and implementation of monitoring programs (refer to each element for specifics.)

The following ongoing service, operations, and maintenance are high priority action items:

a. Surveillance and Patrol

b. Energy - issuance of oil and gas and geothermal leases and processing rights-of-way applications

c. Minerals - processing mining plan and mineral sale, leases, and permits

d. Maintenance of Fiscal Year 1980 level of basic functions (e.g., withdrawal review, realty actions, fire management)

e. Trespass abatement

Cost estimates were developed for accomplishing all work items including Plan completion, additional needed inventories, Plan amendments, activity plan development, implementation, and the service, operations, and maintenance, functions. The cost estimates were based on the best information available. Staff specialists provided data, historical information was used, and input was obtained from other sources, such as industry and other governmental agencies.

4. IMPLEMENTATION DETAIL
For a 10-Year Time Frame

a. General Cost Estimate

The estimated implementation costs by element are depicted annually for Fiscal 4-years 81 through 85 and as a lump sum for Fiscal Years 1986 through 1990 on Table B-1. Cost estimates for the first 5 years increase three-fold over current year funding. The rate of increase would allow for effective utilization of funds and a balanced program of growth. The greatest percentage increase (57 percent) occurs between Fiscal Years 1981 and 1982. Level of funding for Fiscal Year 1981 has been set by Congress. Fiscal Year 1981 is a period of transition between the Plan development component of the BLM management system and the activity planning and implementation components. Planning will be de-emphasized as a result of having completed the Plan and an aggressive program of preparing activity plans and implementing such plans will be initiated.

Table B-1

Funding Level By Element

Plan Elements	FY 81 $ (000)	FY 82 $ (000)	FY 83 $ (000)	FY 84 $ (000)	FY 85 $ (000)	FY 86-FY 90 $ (000)
Cultural Resources	175	250	600	900	1,100	5,250
Native American	100	100	100	100	100	500
Recreation[a]	1,100	2,600	3,975	5,835	5,690	35,000
Wilderness	400	425	115	115	115	1,350
Wildlife	250	350	750	1,050	1,250	7,200
Wild Horse & Burro	550	500	650	650	650	850
Mineral Exploration and Development	350	700	750	800	800	10,250
Grazing	300	800	1,425	1,425	1,425	5,400
Land Tenure	150	300	400	400	800	7,500
Energy and Utilities	400	850	1,000	1,050	1,250	11,300
Access	600	500	500	500	500	2,800
Vegetation	75	100	100	100	100	600
ACEC	550	1,000	350	350	350	1,250
Other Requirements[b]	1,500	2,625	3,585	3,825	4,570	25,750
Totals	**6,500**	**11,100**	**14,300**	**17,100**	**18,700**	**115,000**
Wilderness mineral Inventory c	5,000	5,000				

a Includes: visitor contact program - operating visitor centers and contact stations, information and education program - brochures & pamphlets, ORV permit program, Construction and maintenance of recreation facilities, managing special recreation areas such as Rand and Mecca Hills areas.

b Includes: soil, air, water; fire management; Automated Data Processing; realty, cadastral survey.

c Cost of mineral inventories conducted by the Bureau of Mines & Geological Survey

The estimated implementation costs by element are depicted annually for Fiscal 4-years 81 through 85 and as a lump sum for Fiscal Years 1986 through 1990 on Table B-1. Cost estimates for the first 5 years increase three-fold over current year funding. The rate of increase would allow for effective utilization of funds and a balanced program of growth. The greatest percentage increase (57 percent) occurs between Fiscal Years 1981 and 1982. Level of funding for Fiscal Year 1981 has been set by Congress. Fiscal Year 1981 is a period of transition between the Plan development component of the BLM management system and the activity planning and implementation components. Planning will be de-emphasized as a result of having completed the Plan and an aggressive program of preparing activity plans and implementing such plans will be initialed.

Cost estimates for the Wilderness Element and ACEC program are greatest during the first years, reflecting a goal to prepare Wilderness Study reports and protect ACECs by the end of Fiscal Year 1982. Funding for the required mineral inventories for those Wilderness Study Areas recommended as suitable, is shown on Table B-1 below the total line. The mineral inventories required for those Wilderness Study Areas recommended as suitable will be conducted by the U. S. Bureau of Mines and Geological Survey.

The current projected costs ($8 million) and timeframe (two years) may exceed the capabilities of these agencies. However, the implementation approach, as proposed, assumes that the other agencies' inventories will augment existing BLM inventory data rather than having to start anew.

Cost estimates for the recreation, cultural resources, and wildlife elements increase steadily during the 10-year period. The greatest increases are during the first five years. Several recreation, cultural resource, and wildlife activity plans have been developed during the interim management period and will be completed and/or implemented early in Fiscal Year 1981.

Heavy emphasis has been placed on the wild horse and burro and grazing elements during the first five years. All 17 Herd Management Area Plans and 35 Allotment Management Plans will be completed and implemented by Fiscal Year 1985. Burro and wild horse populations will be reduced to those levels identified in the management goals by Fiscal Year 1985. No grazing allotment plans are shown for implementation in Fiscal Year 1981, because all grazing plans must first be prepared. Partial implementation begins in Fiscal Year 1981, but completion is not anticipated until following years.

Cost estimates for the Motorized Vehicle Access Element are highest in Fiscal Years 1981 and 1982, reflecting the priority placed on implementation of this element. The map showing existing vehicle routes will be prepared in Fiscal Year 1981, and the most critical route approvals in Class L will be completed by Fiscal Year 1982. The entire vehicle access designation process would be completed by 1987. The fairly stable cost estimates across the years include the significantly increased service, operations, and maintenance costs, resulting from implementation of the Motorized Vehicle Access Element (printing of maps, sign and barrier maintenance, road grading and maintenance, etc.).

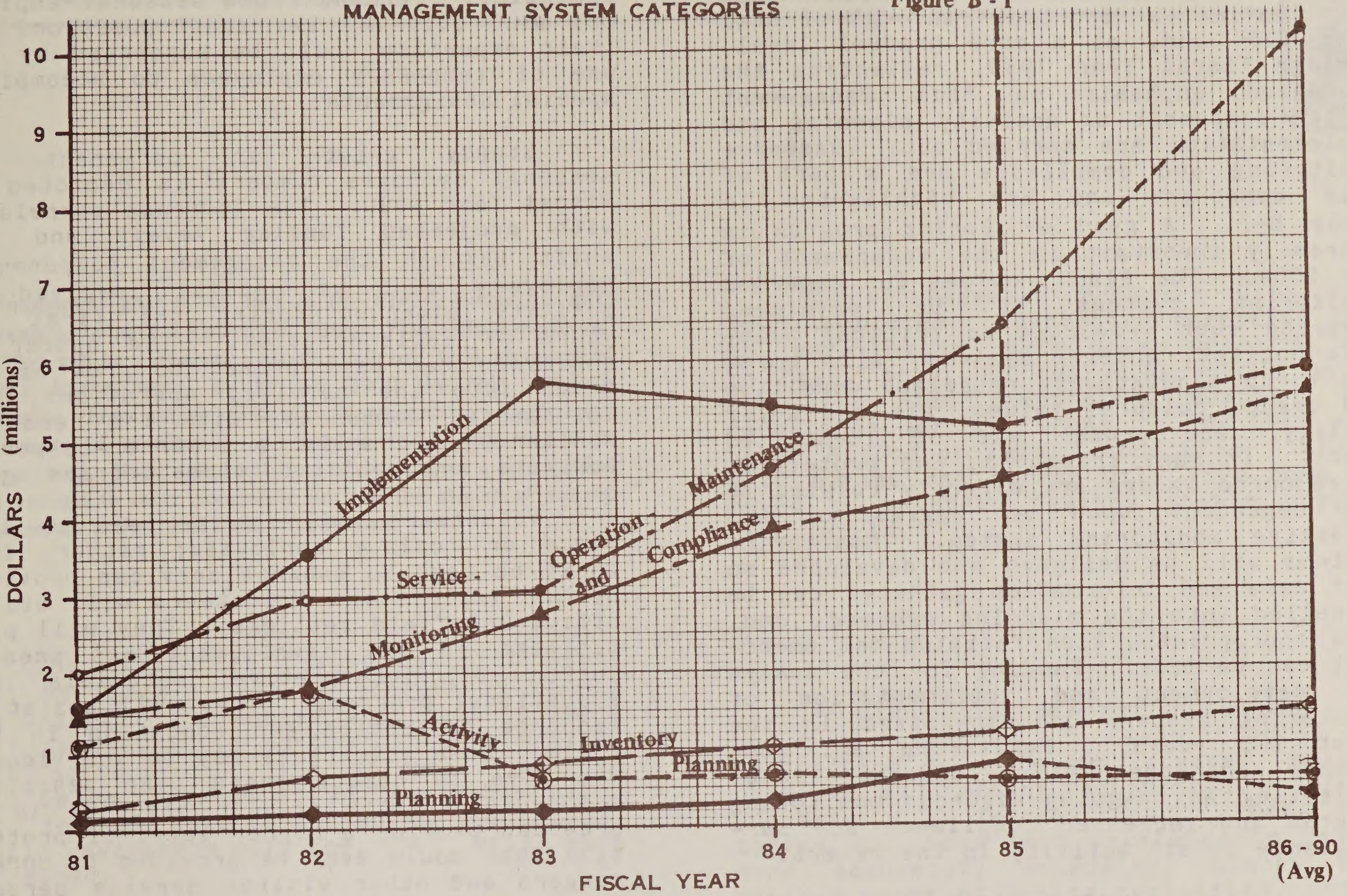
Cost estimates for Geology-Energy-Minerals and the Energy Production and Utilities Corridors Elements steadily increase, reflecting the projected increased need in these activities over the next 10 years. The tables only show funds that need to be appropriated by Congress. Funds required to process major rights-of-way are not shown because they are provided by the utility companies through a cost recovery system.

Cost estimates for the Native American values and Vegetation Elements remain relatively stable during the 10-year period.

Cost estimates for other requirements increase sharply over the first five years. Additional inventory requirements for soils and air and water account for much of this increase. The lands casework load is also expected to increase. The withdrawal review work load required under FLPMA is also a major cost item in this element. Planning cost estimates is at a low level until it increases in Fiscal Year 1985 when the first major Plan revision would be conducted.

Table B-2 and Figure B-1 portray cost estimates broken down into management system categories. Activity planning is greatest in Fiscal Years 1981 and 1982 and gradually decreases in Fiscal Year 1990 when activity plans will be completed. Cost estimates for implementation increase dramatically during the first three years, then decrease slightly in Fiscal Year 1984, after a year of heavy emphasis in the Wild Horse and Burro and the Livestock Grazing Elements. The annual rate of implementation funding would steadily decrease after Fiscal Year 1983 until 1990, as major action items are completed. Inventory has a steady but slight increase, reflecting the need for additional soil and water inventories. Costs estimates for planning are low and stable through Fiscal Year 1984, then increase in Fiscal Year 1985, reflecting the first major Plan revision analysis.

Figure B - 1



Annual Estimates for FY 81 - 85 and 5 Year Avg. Estimate for Fy 86 - 90

Table B-2
Costs by Management Category

	FY 81 ($000)	FY 82 ($000)	FY 83 ($000)	FY 84 ($000)	FY 85 ($000)	FY 86-90 ($000)	5-Year Aver. ($000)
Inventory	250	650	850	1,050	1,200	7,500	1,500
Planning	150	200	300	350	800	1,800	360
Activity Planning	1,480	1,800	700	650	575	2,575	515
Implementation	1,420	3,615	5,850	5,450	5,165	24,125	5,825
Monitoring and Compliance	1,200	1,800	2,800	3,900	4,400	28,000	5,600
Service Operations, Maintenance	2,000	2,985	3,000	4,640	6,435	51,000	10,200
Total	6,500	11,050	13,500	16,040	18,575	115,000	

Service, operations, and maintenance cost estimates increase through Fiscal Year 1985 and, at a more gradual level, through Fiscal Year 1990, reflecting the increased emphasis on this management system component as activity planning and implementation are carried out. Resource monitoring and compliance are a part of this component and are highlighted in Table B-2. A good monitoring program is extremely important in the management of the CDCA. The Plan provides for numerous monitoring systems to be developed covering such resources as critical wildlife habitat, grazing systems, wild horse and burro populations, rangeland condition and trend, cultural values, air and water quality, and proper use of identified roads. In many instances, the protection of resource values are directly related to and dependent upon an aggressive and effective monitoring system. Monitoring systems will be designed and developed so that data and information gathered can be funnelled into the planning process, and, when appropriate, Plan revision and amendment can be made. Funding for the design and development and implementation of monitoring systems is emphasized in the first two years. Monitoring and compliance increases at a moderate rate, reflecting an on-going rigorous monitoring program and increased compliance and surveillance on all activity in the Desert.

b. Personnel

The California Desert District will be established on October 1, 1980, as the management structure for the CDCA. It will be staffed by employees representing diverse skills necessary to implement the Plan. The District Office will have a core staff of resource, planning, budget, administrative, and operations personnel. Resource Area Office staffs will consist predominantly of resources and visitor service personnel.

To effectively spend the dollars required to implement the Plan, successful management of available human resources is essential. Permanent and seasonal employees will fill all key staff positions and their expertise would be augmented by the use of temporary employees to accomplish special assignments.

Steady growth in permanent and seasonal employee numbers is depicted to Fiscal Year 1990. The increase correlates with projected funding levels and the shift through the management components. Employees will be heavily involved in activity planning during the first few years of implementation. The number of employees can be expected to grow as BLM moves into the service, operations, and maintenance component, with the need for monitoring, compliance, person-to-person contacts, and public services increasing.

Volunteers will not be used to displace or replace employees; rather, they would be used to enhance services provided by BLM employees. Volunteers will aid in office and field settings. They will participate in the development and presentation of interpretive materials and educational programs. They will assist in resource protection and education in the field. Some volunteers may be individuals who live in remote areas near sensitive resources. Their regular presence in an area can provide a higher level of protection than could ever be provided by Bureau rangers and other visitor service personnel.

Other volunteers may have special knowledge or insights, gained through years of Desert experience, which they may want to share with Desert users. Details of the numbers and specific roles of volunteers would be completed during Plan implementation.

The California Desert Plan can and will be implemented in a responsive and effective manner. If the proposed funding and staffing levels identified here are not made available, however, implementation will occur at a slower pace with significant changes possible in impacts.

Table B-3

Number of Positions
by Fiscal Year

FISCAL YEAR

	FY 81	FY 82	FY 83	FY 84	FY 85
Permanent	120	140	156	180	193
Seasonal	80	90	95	105	110
Total	200	230	251	285	303

F. Conclusions

An implement goal to be met in the CDCA during the next 20 years is to have a California Desert Plan fully operational. The Plan will be a dynamic, usable guide for BLM management activity in the Desert. By the year 2000 the Plan will have undergone three major revisions. New inventory data, and the results of monitoring and special studies will have been incorporated. Monitoring will have occurred over a time period long enough to more accurately portray the effects of various management actions and their effectiveness.

The California Desert District staff will be large enough to adequately manage the Desert. The public will have become a full participating partner in BLM management activities. The volunteer program will be established as an invaluable asset and, through interpretation and education, public awareness of the CDCA will have increased.

Wilderness areas will have been designated by the Congress as part of the National Wilderness Preservation System. Management plans will be guiding BLM in providing opportunities for wilderness experiences for all citizens, including those of low-income, the handicapped, and the elderly.

Recreational facilities will have been modified or contracted for use by all citizens. Interpretive and recreational experiences will be available to everyone, including those with physical limitations.

Wildlife habitat will have been maintained and improved so that declining wildlife populations will be showing improving trends or stabilization. The number of species on threatened, rare, or endangered lists will be decreasing.

Range mangement projects will have been completed. Vegetative condition will be improving in those areas where it was in fair, poor, or declining condition at the time Plan preparation began. The rangelands for all areas in the CDCA will be in a good or better condition. Excess wild horses and burros will have been removed to maintain healthy stable population levels.

Knowledge of mineral resources will be vastly improved. Rehabilitation and restoration will be an integral, ongoing part of all mining activities. Mining projects will be monitored. Case histories will have been developed to use in more accurately assessing impacts from various types of mining activities, and in developing innovative ways to permit mineral development while protecting environmental quality.

The major land tenure adjustments will be completed. The manageability of lands to meet the objectives of the public and the land managers will be increasing significantly. All other unclassified lands will have been evaluated, and determinations will have been made on retention or disposal. The BLM will be responsive to planned urban expansiion needs for desert communities and residents. Acquisition of critical lands for managing resources will be in progress.

Areas of Critical Environmental Concern will be intensively managed. Special resource values will be protected, while still allowing for compatible uses within the ACEC area.

Cultural resources management will be an aggressive program. Inventory in the CDCA will approach 15 percent, giving a much better base for understanding CDCA prehistory and history, and predicting the locations of other significant cultural sites. Through various mitigation measures, cultural resource destruction and degradation will be significantly reduced.

The Desert will continue to be accessible to people in vehicles, as consistent with changing trends and needs. The Motorized Vehicle Element will not remain static, but will give guidance by responding to new demands for resource protection and access.

New powerlines, and probably power plants, will have been constructed in the Desert. Geothermal leasing will have lead to the development of geothermal power plants. Wind and solar technology will be developed in the CDCA, and it is not unlikely to expect to find at least a prototype wind generation plant in the Desert by the year 2000.

In summary, in 20 years the BLM will be managing the CDCA under a dynamic land use plan in a manner to protect resources while allowing for the desert's enjoyment and use by man. The Desert will be in better resource condition than today and consumptive uses will occur in a wise and stable manner. The objective of the Congress and the public for multiple use for resource protection and for sustained yield will have been achieved. ■

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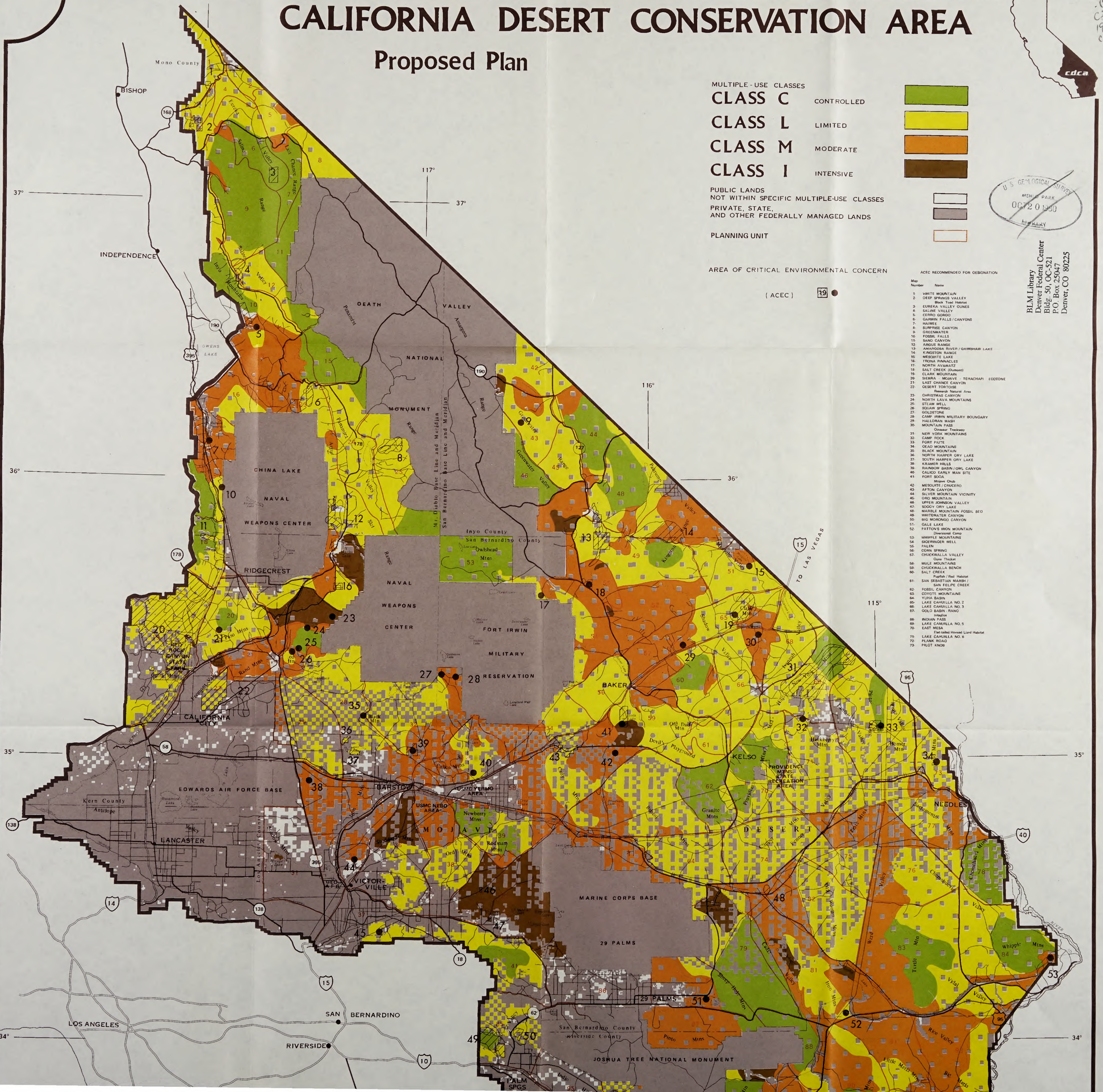
CALIFORNIA DESERT CONSERVATION AREA

Proposed Plan


cdca
118°
117°
116°
115°
37°
36°
35°
34°
Mono County
BISHOP
INDEPENDENCE
OWENS LAKE
DEATH VALLEY NATIONAL MONUMENT
CHINA LAKE NAVAL WEAPONS CENTER
RIDGECREST
NAVAL WEAPONS CENTER
FORT IRWIN MILITARY RESERVATION
Mt. Diablo Base Line and Meridian
San Bernardino Base Line and Meridian
Inyo County
San Bernardino County
Owlshead Mtns
CALIFORNIA CITY
EDWARDS AIR FORCE BASE
Kern County
Antelope Valley
LANCASTER
Los Angeles County
BARSTOW
USMC NEBO AREA
USMC YERMO AREA
MOJAVE
DESERT
VICTORVILLE
GEO. AFB
Newberry Mtns
Rodman Mtns
Ord Mtns
BAKER
KELSO
PROVIDENCE MTNS. STATE RECREATION AREA
Granite Mtns
Kingston
Greenwater Valley
Panamint
Amargosa
Argus Range
TO LAS VEGAS
NEEDLES
Whipple Mtns
Turtle Mtn
MARINE CORPS BASE 29 PALMS
29 PALMS
San Bernardino County
Riverside County
JOSHUA TREE NATIONAL MONUMENT
Pinto Mtns
PALM SPGS
LOS ANGELES
SAN BERNARDINO
RIVERSIDE
Black Mtn
Old Dad Mtn
Devil's Playground
Calico Mtns
Iron Mtns
Ward Valley
Rice Valley
Vidal Valley
Chemehuevi Mtns
14
15
18
58
138
168
178
190
395
127
95
40
10
62

MULTIPLE-USE CLASSES

CLASS C	CONTROLLED	🟩
CLASS L	LIMITED	🟨
CLASS M	MODERATE	🟧
CLASS I	INTENSIVE	🟫
PUBLIC LANDS NOT WITHIN SPECIFIC MULTIPLE-USE CLASSES		☐
PRIVATE, STATE, AND OTHER FEDERALLY MANAGED LANDS		■
PLANNING UNIT		☐

AREA OF CRITICAL ENVIRONMENTAL CONCERN (ACEC) 19 ●

ACEC RECOMMENDED FOR DESIGNATION

Map Number	Name
1-	WHITE MOUNTAIN
2-	DEEP SPRINGS VALLEY Black Toad Habitat
3-	EUREKA VALLEY DUNES
4-	SALINE VALLEY
5-	CERRO GORDO
6-	DARWIN FALLS / CANYONS
7-	HAIWEE
8-	SURPRISE CANYON
9-	GREENWATER
10-	FOSSIL FALLS
11-	SAND CANYON
12-	ARGUS RANGE
13-	AMARGOSA RIVER / GRIMSHAW LAKE
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71-	LAKE CAHUILLA NO. 6
72-	PLANK ROAD
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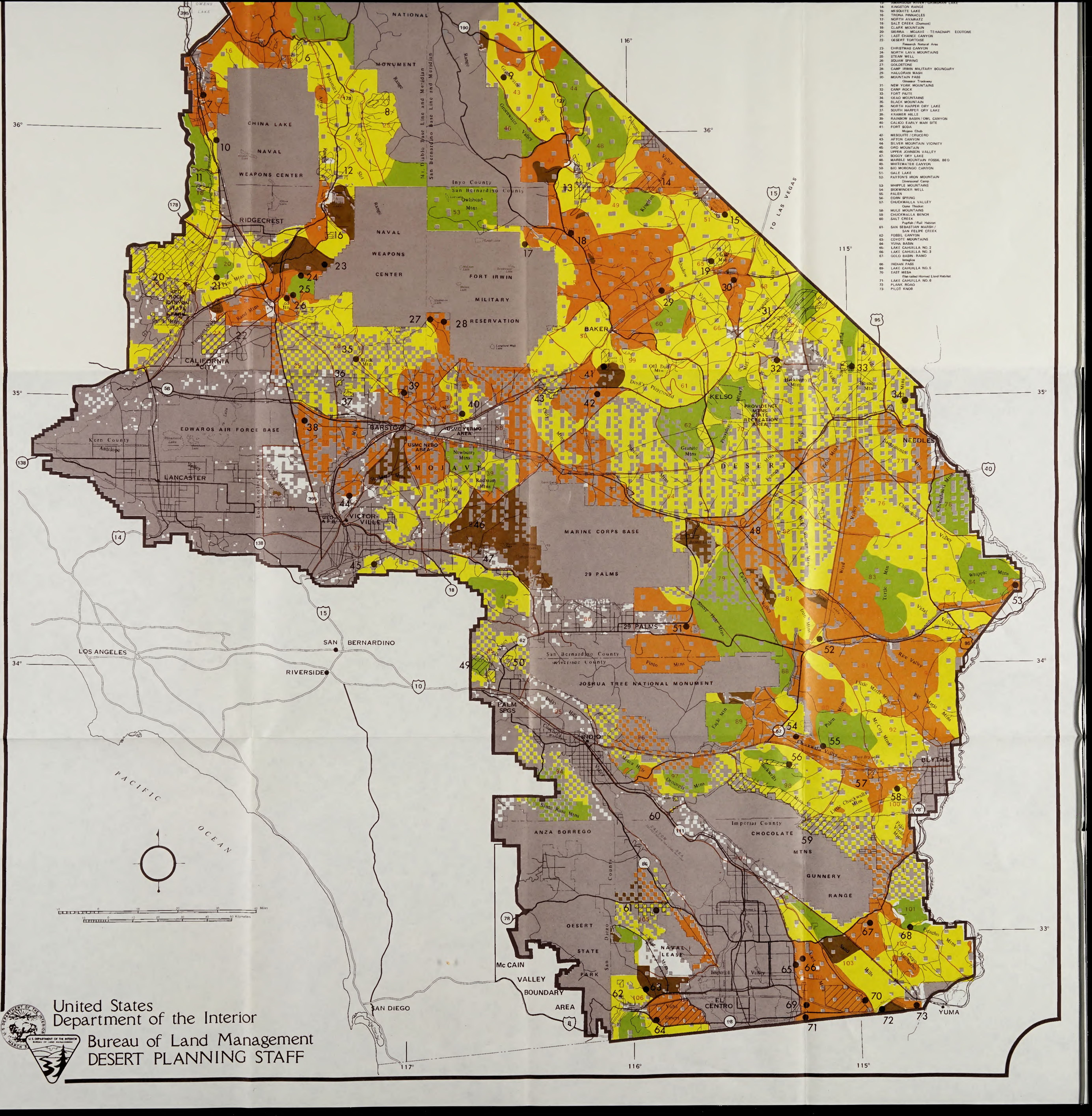

NATIONAL
MONUMENT
CHINA LAKE
NAVAL
WEAPONS CENTER
NAVAL
WEAPONS
CENTER
FORT IRWIN
MILITARY
RESERVATION
RIDGECREST
CALIFORNIA CITY
EDWARDS AIR FORCE BASE
LANCASTER
BARSTOW
VICTORVILLE
BAKER
KELSO
PROVIDENCE MTNS STATE RECREATION AREA
NEEDLES
MARINE CORPS BASE
29 PALMS
JOSHUA TREE NATIONAL MONUMENT
PALM SPGS
INDIO
BLYTHE
ANZA BORREGO
DESERT
STATE
PARK
CHOCOLATE
MTNS
GUNNERY
RANGE
EL CENTRO
YUMA
McCAIN VALLEY BOUNDARY AREA
SAN BERNARDINO
RIVERSIDE
LOS ANGELES
SAN DIEGO
PACIFIC OCEAN
TO LAS VEGAS
Inyo County
San Bernardino County
Riverside County
Imperial County
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D E S E R T
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14. KINGSTON RANGE
15. MESQUITE LAKE
16. TRONA PINNACLES
17. NORTH AVAWATZ
18. SALT CREEK (Dumont)
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Department of the Interior

Bureau of Land Management
DESERT PLANNING STAFF

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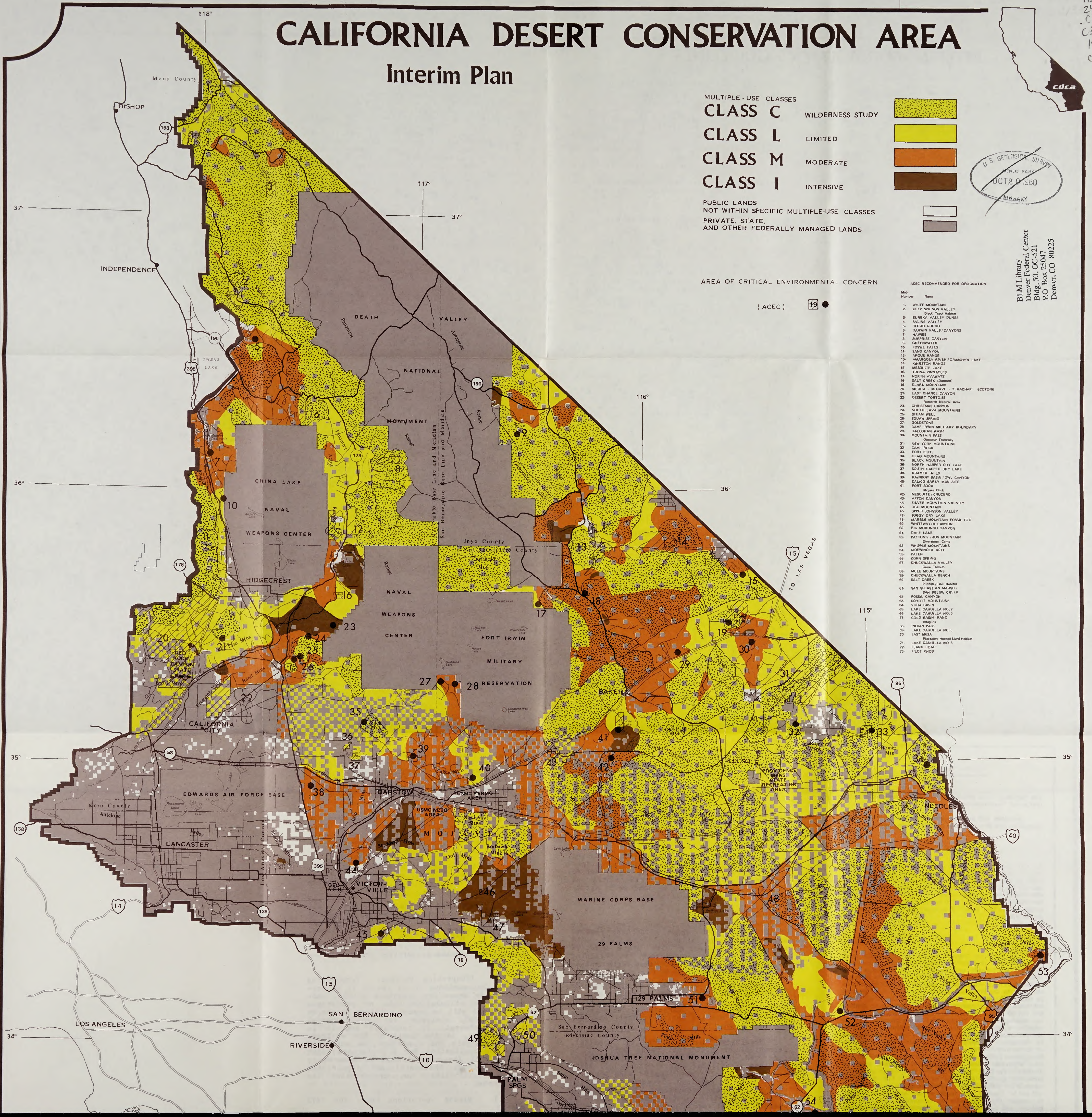
CALIFORNIA DESERT CONSERVATION AREA

Interim Plan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BISHOP
INDEPENDENCE
OWENS LAKE
DEATH VALLEY NATIONAL MONUMENT
Panamint
Amargosa
Range
CHINA LAKE NAVAL WEAPONS CENTER
NAVAL WEAPONS CENTER
RIDGECREST
FORT IRWIN MILITARY RESERVATION
Mt. Diablo Base Line and Meridian
San Bernardino Base Line and Meridian
Inyo County
San Bernardino County
TO LAS VEGAS
BAKER
KELSO
PROVIDENCE MTNS. STATE RECREATION AREA
NEEDLES
CALIFORNIA CITY
EDWARDS AIR FORCE BASE
Kern County
Antelope
LANCASTER
Los Angeles County
BARSTOW
USMC YERMO AREA
USMC NEBO AREA
MOJAVE
DESERT
GEO A.F.B.
VICTORVILLE
MARINE CORPS BASE
29 PALMS
29 PALMS
San Bernardino County
Riverside County
JOSHUA TREE NATIONAL MONUMENT
PALM SPGS
LOS ANGELES
SAN BERNARDINO
RIVERSIDE
RED ROCK CANYON STATE PARK
Rand Mtns
Fremont Valley
Calico Mtns
Ord Mtns
Rodman Mtns
Iron Mtns
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MULTIPLE-USE CLASSES

CLASS C	WILDERNESS STUDY	▨
CLASS L	LIMITED	🟨
CLASS M	MODERATE	🟧
CLASS I	INTENSIVE	🟫
PUBLIC LANDS NOT WITHIN SPECIFIC MULTIPLE-USE CLASSES		☐
PRIVATE, STATE, AND OTHER FEDERALLY MANAGED LANDS		▩

AREA OF CRITICAL ENVIRONMENTAL CONCERN (ACEC) 19 ●

ACEC RECOMMENDED FOR DESIGNATION

Map Number	Name
1-	WHITE MOUNTAIN
2-	DEEP SPRINGS VALLEY Black Toad Habitat
3-	EUREKA VALLEY DUNES
4-	SALINE VALLEY
5-	CERRO GORDO
6-	DARWIN FALLS / CANYONS
7-	HAIWEE
8-	SURPRISE CANYON
9-	GREENWATER
10-	FOSSIL FALLS
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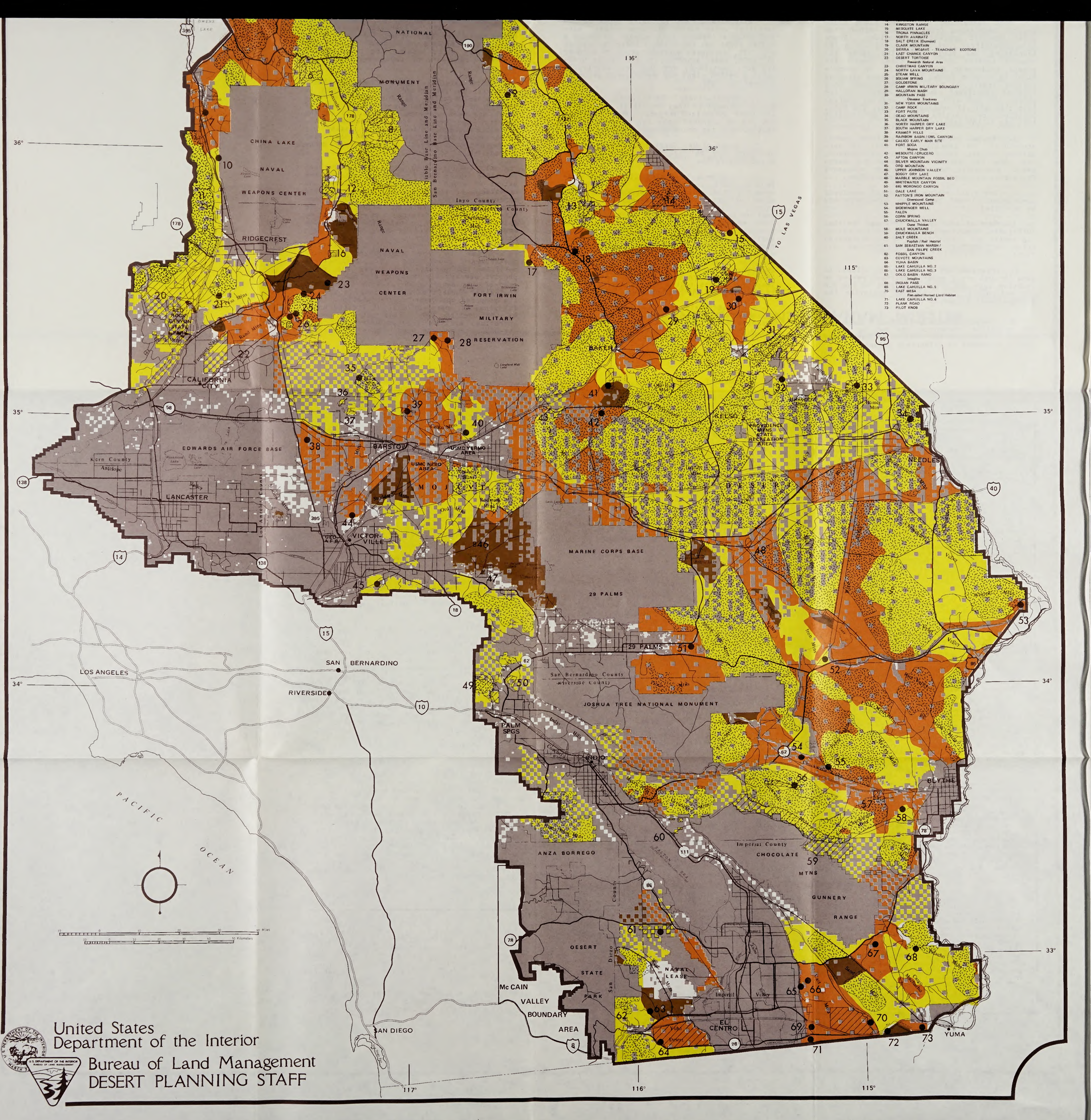
CHINA LAKE NAVAL WEAPONS CENTER
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DESERT PLANNING STAFF

INTERIM MANAGEMENT GUIDELINES

Excerpts from Interim Management Policy
and Guidelines for Lands Under
Wilderness Review

(December 12, 1979)

III. Guidelines for Specific Activities

These guidelines are an application of the Interim Management Policy (IMP) to some of the most common activities that take place on the public lands. It should be recognized that factors other than the Interim Management Policy enter into the decisions made by the Bureau of Land Management on specific projects and activities - among them the laws, policies, and regulations governing that type of activity, and resource management plans for the affected land.

A. RECREATION

Most recreation activities (including fishing and hunting) are permitted on lands under wilderness review. However, some activities may be prohibited or restricted because they require permanent structures or because they depend on cross-country use of motor vehicles (for example: pickup vehicles for balloons or sailplanes).

BLM will analyze the magnitude of all proposed activities to ensure that recreation use will not cause impacts that impair the area's wilderness suitability.

Most recreation uses take place under general permission from the BLM rather than under specific project applications. There is a possibility that a continuing use or an increasing use could gradually cause increased impacts and, over time, impair the area's wilderness suitability. An example might be erosion caused by increased off-road vehicle travel on trails. To prevent this type of impairment caused by cumulative impacts, the BLM will monitor ongoing recreation uses and, if necessary, adjust the time, location, or quantity of use, or prohibit that use in the impacted area.

1. No new permanent recreational roads, structures, or installations will be permitted, except structures or installations that are the minimum necessary for human health and safety or the minimum necessary for public enjoyment of wilderness values.

2. Hobby collecting of mineral specimens (rockhounding) and vegetative specimens may be permitted.

3. Recreational use of off-road vehicles (ORVs) are permitted on designated and existing routes and within "open" areas designated prior to approval of FLPMA (October 21, 1976).

4. Organized ORV events may be allowed to pass through areas under wilderness review on existing ways and trails, so long as the BLM has determined that such use satisfies the nonimpairment criteria. . .

10. Camping may be permitted. Campsites for primitive recreation use may be established if they are the minimum necessary for public enjoyment of wilderness values. . .

Nonimpairment Criteria

The following three criteria are referred to many times in the text as the "nonimpairment criteria."

Activities will be considered nonimpairing if the BLM determines that they meet each of the following criteria:

(a) It is temporary. This means that the use or activity may continue until the time when it must be terminated in order to meet the reclamation requirement of paragraphs (b) and (c) below. A temporary use that creates no new surface disturbance may continue unless Congress designates the area as wilderness, so long as it can easily and immediately be terminated at that time, if necessary, to management of the area as wilderness.

(b) Any temporary impacts caused by the activity must, at a minimum, be capable of being reclaimed to a condition of being substantially unnoticeable in the wilderness study area (or inventory unit) as a whole by the time the Secretary of the Interior is scheduled to send his recommendations on that area to the President, and the operator will be required to reclaim the impacts to that standard by that date. If the wilderness study is accelerated, the reclamation deadline will not be changed. A full schedule of wilderness studies will be developed by the Department upon completion of the intensive wilderness inventory. In the meantime, in areas not yet scheduled for wilderness study, the reclamation will be scheduled for completion within four years after approval of the activity. (Obviously, if and when the Interim Management Policy ceases to apply to an inventory unit dropped from wilderness review following a final wilderness inventory decision of the BLM State Director, the reclamation deadline previously specified will cease to apply.) The Secretary's schedule for transmitting his recommendations to the President will not be changed as a result of any unexpected inability to complete the reclamation by the specified date, and such inability will not constrain the Secretary's recommendation

B. CULTURAL AND PALEONTOLOGICAL RESOURCES

Cultural and paleontological resource inventories, studies, and research involving surface examination or limited subsurface sampling may be permitted. Salvage of archeological and paleontological sites; rehabilitation, stabilization, reconstruction, and restoration work on historic structures; excavation; and extensive surface collection may be permitted if the specific project satisfies the nonimpairment criteria. Permanent physical protection, such as fences, will be limited to those measures needed to protect high-value resources, and will be substantially unnoticeable in the area as a whole.

C. LANDS ACTIONS – DISPOSAL, RIGHTS-OF-WAY, ACCESS, AND WITHDRAWALS

1. Disposal. With the exceptions provided below, lands under wilderness review may not be disposed of through any means, including public sales, exchanges, patents under the Recreation and Public Purposes Act, color of title Classes I and II, sales under the Unintentional Trespass Act, agricultural leases, desert land entries (except where a vested right was established prior to October 21, 1976), or State selections. (Lands tentatively approved for State selection in Alaska are exempt from wilderness review and are not subject to the Interim Management Policy.)

Disposals of the following types may be permitted under normal BLM procedures: mining patents; desert land entries in which a vested right was established prior to October 21, 1976, exchanges approved prior to October 21, 1976, under authority of the Taylor Grazing Act, Section 8; and homestead entries in which a vested right was established prior to October 21, 1976.

2. Rights-of-Way. Existing rights-of-way may be renewed if they are still being used for their authorized purpose. New rights-of-way may be approved only for temporary uses that satisfy the nonimpairment criteria. . .

3. Right-of-Way Corridors. Right-of-way corridors may be designated on lands under wilderness review. . .

4. Access to Mining Claims and Non-Federal Land. Construction of permanent access routes will not be approved on lands under wilderness review, except two conditions: (a) when such access qualifies as part of the same manner and degree of grandfathered mineral uses and there is no reasonable, less impairing, alternative access available, and (b) when necessary for operations on mining claims that had a valid discovery prior to Octover 21, 1976, under criteria described in Section J of this policy, and there is no reasonable, less impairing, alternative access available. Temporary access routes may be approved only if they satisfy the nonimpairment criteria...

5. Withdrawals. Existing withdrawals for military purposes or for specific purposes of agencies other than the BLM may be renewed if the withdrawal is still serving its purpose. No new withdrawals may be made for such purposes, except temporary withdrawals that satisfy the nonimpairment criteria.

Withdrawals transferring land to the U.S. Fish and Wildlife Service, U.S. Forest Service, or National Park Service may be approved if the land is part of an already-designated unit of the National Wilderness Preservation System or is part of a wilderness study area mandated by Act of Congress.

D. FORESTRY

. . .Trees may be cut when necessary as part of a mining operation on a pre-FLPMA claim with a valid pre-FLPMA discovery, or when the BLM has determined that this is necessary for insect and disease control or in emergencies such as fire. . .

Domestic firewood gathering, conducted under BLM permits, may be allowed to continue in areas where it was being done before October 21, 1976 (including cross-country use of motor vehicles), only so long as it satisfies the nonimpairment criteria.

E. WILDLIFE

Hunting, fishing, and trapping are permitted on lands under wilderness review, under State regulations. The BLM will continue to cooperate with State wildlife agencies in the management of resident wildlife species in accordance with established policies and procedures. . .

Stocking of wildlife and fish species native to North American may be permitted...

Introduction of threatened, endangered, or sensitive species native to North American may be allowed. . .

Vegetative manipulation by chemical, mechanical or biological means will not be permitted, except to maintain plantings or seedings established before October 21, 1976. Prescribed burning may also be done where it is required to maintain the natural condition of fire-dependent ecosystems. Hand or aerial seeding of native species may be done to restore natural vegetation.

H. RANGELAND MANAGEMENT

1. General. In some respects, rangeland management activities are less restricted by the Interim Management Policy than other activities. This partly because livestock grazing, at appropriate stocking levels, in itself, is compatible with maintaining wilderness suitability; it is partly because most grazing operations on the public lands qualify as grandfathered uses; and it is partly because some range improvements enhance wilderness values by better protecting the rangeland in a natural condition. . .

5. Wild Horse and Burro Management. Temporary facilities for management of wild horses and burros may be installed if they satisfy the nonimpairment criteria. The above guidelines for grazing practices and range improvements will also apply to wild horse and burro management, where appropriate.

[Populations of wild and free-roaming horses and burros will be maintained (in accordance with the Wild Horse and Burro Act of 1971) but will be subject to removal or other controls to protect sensitive resources.]

J. MINERAL USES

. . .All mineral activities that were existing on October 21, 1976, may continue in the same manner and degree in which they were being conducted on October 21, 1976, even if they would impair wilderness suitability. These activities fall within the grandfather concept as discussed in Chapter 1.B.6 of the IMP. They will, however, be regulated to prevent unnecessary or undue degradation of the lands. . .

Valid existing rights of mining claimants will be recognized. For a claim to qualify as a valid existing right, a "discovery" of a valuable mineral, the test of which has been accpeted in case law as the "prudent man test," must be demonstrated. Activities under valid existing rights may impair wilderness suitability, but they will be regulated to prevent unnecessary or undue degradation of the lands.

All leases issued on or before October 21, 1976, have valid existing rights, the extent of which is defined by the terms and conditions of each specific lease. For the majority of pre- FLPMA leases the lease rights are not absolute nor unqualified. In other words, if there were no pre-FLPMA grandfathered activities, post-FLPMA operations would not be allowed if they would impair wilderness suitability. . .

[Prior to any significant surface-disturbing prospecting or exploratory activity for mineral resources, the prospective user will submit to the BLM authorized officer managing the area or to the U.S. Geological Survey, as appropriate, a plan of the proposed operation and reclamation. Mining plans of operation will be treated under 43 CFR Section 3809. All other plans of operations will be treated under the joint BLM-USGS procedures and other applicable regulations.]

1. Oil and Gas and Geothermal Leasing, Exploration, and Development.

a. Pre-FLPMA Leases. All pre-FLPMA leases on which actual pre-FLPMA physical impacts had been created through such activities as seismic, thermal gradient or other exploration drilling, production drilling, or construction of production related facilities, are grandfathered. . .

e. Exploration. Post-FLPMA oil and gas or geothermal exploration applied for under 43 CFR 3045 or 43 CFR 3209 will continue to be approved if the BLM determines that it satisfies the nonimpairment criteria. . .

4. Other Leasable Minerals (Phosphate, Potash, Sodium, Sulphur, and Hardrock (Solid) Minerals on Acquired Lands, Including Uranium).

a. Pre-FLPMA Leases and Permits. All pre-FLPMA leases on which actual pre-FLPMA physical impacts have been created through such activities as exploration drilling, production drilling, or construction of production-related facilities, may continue consistent with the grandfather provisions...

b. Prospecting Permits. Propsecting permits may continue to be issued in wilderness study areas (or inventory units), subject to a stipulation that no preference right lease will be issued until or unless an environmental analysis (or environmental impact statement) is completed and it is demonstrated, on the basis of the environmental analysis and a mining plan submitted with the application for a preference right lease, that the minerals can be removed by mining methods that will not impair the area's suitability for preservation as wilderness. . .

3. Mining Operations Under the 1872 Mining

Most recreation uses take place under general permission from the BLM rather than under specific project applications. There is a possibility that a continuing use or an increasing use could gradually cause increased impacts and, over time, impair the area's wilderness suitability. An example might be erosion caused by increased off-road vehicle travel on trails. To prevent this type of impairment caused by cumulative impacts, the BLM will monitor ongoing recreation uses and, if necessary, adjust the time, location, or quantity of use, or prohibit that use in the impacted area.

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Nonimpairment Criteria

The following three criteria are referred to many times in the text as the "nonimpairment criteria."

Activities will be considered nonimpairing if the BLM determines that they meet each of the following criteria:

(a) It is temporary. This means that the use or activity may continue until the time when it must be terminated in order to meet the reclamation requirement of paragraphs (b) and (c) below. A temporary use that creates no new surface disturbance may continue unless Congress designates the area as wilderness, so long as it can easily and immediately be terminated at that time, if necessary, to management of the area as wilderness.

(b) Any temporary impacts caused by the activity must, at a minimum, be capable of being reclaimed to a condition of being substantially unnoticeable in the wilderness study area (or inventory unit) as a whole by the time the Secretary of the Interior is scheduled to send his recommendations on that area to the President, and the operator will be required to reclaim the impacts to that standard by that date. If the wilderness study is accelerated, the reclamation deadline will not be changed. A full schedule of wilderness studies will be developed by the Department upon completion of the intensive wilderness inventory. In the meantime, in areas not yet scheduled for wilderness study, the reclamation will be scheduled for completion within four years after approval of the activity. (Obviously, if and when the Interim Management Policy ceases to apply to an inventory unit dropped from wilderness review following a final wilderness inventory decision of the BLM State Director, the reclamation deadline previously specified will cease to apply.) The Secretary's schedule for transmitting his recommendations to the President will not be changed as a result of any unexpected inability to complete the reclamation by the specified date, and such inability will not constrain the Secretary's recommendation with respect to the area's suitability or nonsuitability for preservation as wilderness.

The reclamation will, to the extent practicable, be done while the activity is in progress. Reclamation will include the complete recontouring of all cuts and fills to blend with the natural topography, the replacement of topsoil, and the restoration of plant cover at least to the point where natural succession is occurring. Plant cover will be restored by means of reseeding or replanting, using species previously occurring in the area. If necessary, irrigation will be required. The reclamation will be complete, and the impacts will be substantially unnoticeable in the area as a whole, by the time the Secretary is scheduled to send his recommendations to the President. ("Substantially unnoticeable" is defined in Appendix F of the IMP.)

(c) When the activity is terminated, and after any needed reclamation is complete, the area's wilderness values must not have been degraded so far, compared with the area's values for other purposes, as to significantly constrain the Secretary's recommendation with respect to the area's suitability or nonsuitability for preservation as wilderness. The wilderness values to be considered are those mentioned in Section 2(c) of the Wilderness Act, including naturalness, outstanding opportunities for solitude or for primitive and unconfined recreation, and ecological, geological or other features of scientific, educational, scenic, or historical value.

Disposals of the following types may be permitted under normal BLM procedures: mining patents; desert land entries in which a vested right was established prior to October 21, 1976, exchanges approved prior to October 21, 1976, under authority of the Taylor Grazing Act, Section 8; and homestead entries in which a vested right was established prior to October 21, 1976.

2. Rights-of-Way. Existing rights-of-way may be renewed if they are still being used for their authorized purpose. New rights-of-way may be approved only for temporary uses that satisfy the nonimpairment criteria. . .

3. Right-of-Way Corridors. Right-of-way corridors may be designated on lands under wilderness review. . .

4. Access to Mining Claims and Non-Federal Land. Construction of permanent access routes will not be approved on lands under wilderness review, except two conditions: (a) when such access qualifies as part of the same manner and degree of grandfathered mineral uses and there is no reasonable, less impairing, alternative access available, and (b) when necessary for operations on mining claims that had a valid discovery prior to Octover 21, 1976, under criteria described in Section J of this policy, and there is no reasonable, less impairing, alternative access available. Temporary access routes may be approved only if they satisfy the nonimpairment criteria...

5. Withdrawals. Existing withdrawals for military purposes or for specific purposes of agencies other than the BLM may be renewed if the withdrawal is still serving its purpose. No new withdrawals may be made for such purposes, except temporary withdrawals that satisfy the nonimpairment criteria.

Withdrawals transferring land to the U.S. Fish and Wildlife Service, U.S. Forest Service, or National Park Service may be approved if the land is part of an already-designated unit of the National Wilderness Preservation System or is part of a wilderness study area mandated by Act of Congress.

D. FORESTRY

. . .Trees may be cut when necessary as part of a mining operation on a pre-FLPMA claim with a valid pre-FLPMA discovery, or when the BLM has determined that this is necessary for insect and disease control or in emergencies such as fire. . .

Domestic firewood gathering, conducted under BLM permits, may be allowed to continue in areas where it was being done before October 21, 1976 (including cross-country use of motor vehicles), only so long as it satisfies the nonimpairment criteria.

E. WILDLIFE

Hunting, fishing, and trapping are permitted on lands under wilderness review, under State regulations. The BLM will continue to cooperate with State wildlife agencies in the management of resident wildlife species in accordance with established policies and procedures. . .

Stocking of wildlife and fish species native to North American may be permitted...

Introduction of threatened, endangered, or sensitive species native to North American may be allowed. . .

Vegetative manipulation by chemical, mechanical or biological means will not be permitted, except to maintain plantings or seedings established before October 21, 1976. Prescribed burning may also be done where it is required to maintain the natural condition of fire-dependent ecosystems. Hand or aerial seeding of native species may be done to restore natural vegetation.

State and Federal agencies may use temporary enclosures and facilities to trap or transplant wildlife so long as the nonimpairment criteria are met. Certain permanent installations may be permitted to maintain or improve conditions for wildlife and fish, if the benefiting species enhance wilderness values. Installations to protect sources of water on which native wildlife depend, such as enclosures, may be built for permanent use if they are substantially unnoticeable in the area as a whole and blend into the natural setting. . .

F. FIRE MANAGEMENT

BLM will continue all presuppression, suppression, and post-suppression fire activities under current methods of operation, using caution to avoid unnecessary impairment of an area's suitability for preservation as wilderness, until new fire managment plans are developed for specific wilderness study areas. . .

being conducted on October 21, 1976, even if they would impair wilderness suitability. These activities fall within the grandfather concept as discussed in Chapter 1.B.6 of the IMP. They will, however, be regulated to prevent unnecessary or undue degradation of the lands. . .

Valid existing rights of mining claimants will be recognized. For a claim to qualify as a valid existing right, a "discovery" of a valuable mineral, the test of which has been accpeted in case law as the "prudent man test," must be demonstrated. Activities under valid existing rights may impair wilderness suitability, but they will be regulated to prevent unnecessary or undue degradation of the lands.

All leases issued on or before October 21, 1976, have valid existing rights, the extent of which is defined by the terms and conditions of each specific lease. For the majority of pre- FLPMA leases the lease rights are not absolute nor unqualified. In other words, if there were no pre-FLPMA grandfathered activities, post-FLPMA operations would not be allowed if they would impair wilderness suitability. . .

[Prior to any significant surface-disturbing prospecting or exploratory activity for mineral resources, the prospective user will submit to the BLM authorized officer managing the area or to the U.S. Geological Survey, as appropriate, a plan of the proposed operation and reclamation. Mining plans of operation will be treated under 43 CFR Section 3809. All other plans of operations will be treated under the joint BLM-USGS procedures and other applicable regulations.]

1. Oil and Gas and Geothermal Leasing, Exploration, and Development.

a. Pre-FLPMA Leases. All pre-FLPMA leases on which actual pre-FLPMA physical impacts had been created through such activities as seismic, thermal gradient or other exploration drilling, production drilling, or construction of production related facilities, are grandfathered. . .

e. Exploration. Post-FLPMA oil and gas or geothermal exploration applied for under 43 CFR 3045 or 43 CFR 3209 will continue to be approved if the BLM determines that it satisfies the nonimpairment criteria. . .

4. Other Leasable Minerals (Phosphate, Potash, Sodium, Sulphur, and Hardrock (Solid) Minerals on Acquired Lands, Including Uranium).

a. Pre-FLPMA Leases and Permits. All pre-FLPMA leases on which actual pre-FLPMA physical impacts have been created through such activities as exploration drilling, production drilling, or construction of production-related facilities, may continue consistent with the grandfather provisions...

b. Prospecting Permits. Propsecting permits may continue to be issued in wilderness study areas (or inventory units), subject to a stipulation that no preference right lease will be issued until or unless an environmental analysis (or environmental impact statement) is completed and it is demonstrated, on the basis of the environmental analysis and a mining plan submitted with the application for a preference right lease, that the minerals can be removed by mining methods that will not impair the area's suitability for preservation as wilderness. . .

3. Mining Operations Under the 1872 Mining Law.

a. Location, Prospecting, Exploration, and Mining. Mining operations conducted on lands under wilderness review will be subject to the forthcoming regulations 43 CFR 3802. The regulations will not apply to areas where a final decision that the area lacks wilderness characteristics has been made through the BLM wilderness inventory process. These regulations will provide a procedure for notifying the BLM of activities being conducted or proposed to be conducted on mining claims and will also establish the standards for approval of the conduct of those operations, including reclamation.

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*Access to State School Lands. The law is not entirely clear on the extent to which a State (or its permittees or lessees) has a right of access to State school trust lands which are entirely surrounded by public lands. A Federal district court in Utah has recently held that the State has a right of access which is subject to regulation by BLM so long as the State may reasonably develop the State lands economically to fulfill the purpose of the State school land grant. . .

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